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Operations and Algebraic Thinking
3.OA.A.01
Items 1 – 7

ITEM 1

Ms. Dorr grouped her class into 6 teams of 4 students each.

Which expression represents the total number of students in the class?

A. 6 + 4

B. 6 x 4

C. 4 + 4 + 4 + 4

D. 6 x 6 x 6 x 6

ITEM 2

There are 7 cages of hamsters at a pet store. There are 5 hamsters in each cage. Which expression represents the total number of hamsters?

A. 7×5

B. $7 \div 5$

C. $7 + 5$

D. $7 - 5$

ITEM 3

Mr. Chang has 4 boxes of crayons. There are 12 crayons in each box. Which expression represents the total number of crayons?

A. $4 + 12$

B. $12 - 4$

C. 4×12

D. $12 \div 4$

ITEM 4

Which problem can be solved using the expression 9 × 3?

A. Ian read 9 books. Then he read 3 more books. How many books has Ian read in all?

B. Jenna had 9 hats. Then she gave 3 hats away. How many hats does Jenna have now?

C. Cody has 9 dogs. Each dog eats 3 treats. How many treats did the dogs eat in all?

D. Claire has 9 plants. She puts 3 plants in each pot. How many pots did Claire use?

ITEM 5

Linda puts dolls on shelves.

Which expression represents the total number of dolls?

A. 3 × 3

B. 3 × 4

C. 3 + 4

D. 3 + 3 + 3

ITEM 6

Which problem could be solved by multiplying 2 x 6?

A. Caitlyn bought 6 bags of crackers. She split the bags between two people. How many bags does each person get?

B. Caitlyn had 2 crackers. Her sister gave her 6 more crackers. How many crackers does Caitlyn have now?

C. Caitlyn had 6 crackers, but she ate 2 for lunch. How many crackers does Caitlyn have left?

D. Caitlyn bought 2 bags of crackers. There were 6 crackers in each bag. How many crackers does Caitlyn have in all?

ITEM 7

Which story problem can be solved using the expression 3×4?

A. 3 children buy some pears at the store.
Each child buys 4 pears.
How many pears do the children have altogether?

B. Missy lives 3 miles from school.
Kerry lives 4 miles from school.
How much farther does Kerry live from school than Missy?

C. Gita, Samara, and Taj each have a piece of rope of the same length.
Together, they have a total length of 4 feet.
How long is each piece of rope?

D. A girl has 3 pounds of strawberries.
She gives the same amount to each of 4 friends.
How many pounds of strawberries does each friend get?

Operations and Algebraic Thinking
3.OA.A.02
Items 8 – 14

ITEM 8

Nina bought 108 eggs. There are 12 eggs per carton. Which expression represents the number of cartons Nina bought?

A. 108 ÷ 12

B. 108 + 12

C. 108 × 12

D. 108 – 12

ITEM 9

There are 72 students at a camp. They separate into 8 equal groups. Which expression represents the number of students in each group?

A. $72 + 8$

B. $72 – 8$

C. 72×8

D. $72 \div 8$

ITEM 10

Which situation could be represented by expression 6 ÷ 2?

A. Lisa bought 6 muffins. They each cost $2.

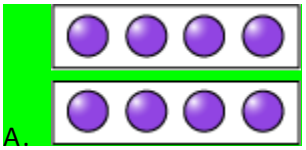
B. John had 6 apples. Then he ate 2 apples.

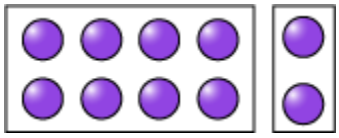
C. Don had 6 toy cars. Then he bought 2 more toy cars.

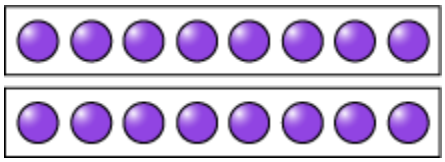
D. Jen had 6 fish. She put 2 fish in each fish bowl.

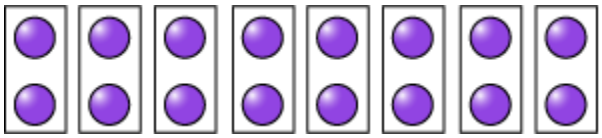
ITEM 11

Stan uses counters to model math problems. Which set of counters models 8 ÷ 2 __?

A. 

B. 

C. 

D. 

ITEM 12

Which situation can be modeled by the following expression?

$12 \div 4$

A. Carly had 12 stickers. She lost 4 of them.

B. Keko has 12 necklaces. Each necklace has 4 beads.

C. Milo had 12 friends at his party. Each friend brought 4 cookies.

D. Stan has 12 apples. He wants to give the same number of apples to each of 4 friends.

ITEM 13

Which situation could be represented by the expression 32 ÷ 4?

A. Jillian has 32 candies and gives 4 to a friend.

B. Jillian has 4 friends and gives each friend 32 candies.

C. Jillian had 32 candies and shared them equally with 4 friends.

D. Jillian has 32 candies and a friend gives her 4 more candies.

ITEM 14

Which sentence could be represented by the expression 28 ÷ 7?

A. Samantha had 28 treats and she shared them equally among 7 friends.

B. Samantha has 28 friends and she gives them each 4 treats.

C. Samantha has 7 friends and she gave them each 28 treats.

D. Samantha had 28 treats and shared them equally between herself and 7 friends.

Operations and Algebraic Thinking
3.OA.A.03
Items 15 – 31

ITEM 15

Charles knows that there are 42 days until summer vacation. How many 7-day weeks is this?

A. 4 weeks

B. 5 weeks

C. 6 weeks

D. 7 weeks

ITEM 16

Paul is setting tables for a party. He wants to put 6 plates on each table. There are 9 tables. How many total plates does Paul need?

A. 48

B. 54

C. 63

D. 69

ITEM 17

Maria has 2 boxes. Each box holds 8 toy cars. What is the total number of toy cars Maria has?

A. 4

B. 6

C. 10

D. 16

ITEM 18

Samantha has 3 shelves of books. There are 8 books on each shelf. How many books does Samantha have?

A. 11

B. 21

C. 24

D. 27

ITEM 19

Jaylyn gets four candies for each quarter she puts into a candy machine.

How many candies will Jaylyn get if she puts six quarters in the candy machine?

A. 10

B. 23

C. 24

D. 30

ITEM 20

For a party, Madison bought 10 bunches of roses. There were 8 roses in each bunch. What is the total number of roses Madison bought?

A. 18

B. 80

C. 88

D. 108

ITEM 21

Kaci is making candy bags for the school Fall Festival. She puts 7 candies in each bag. If Kaci used 42 pieces of candy, how many bags did she make?

A. 6

B. 8

C. 35

D. 49

ITEM 22

Carla counts pairs of shoes in a closet. There are 18 shoes. How many pairs did she count?

A. 8

B. 9

C. 10

D. 12

ITEM 23

Miles has 30 baseball cards. Mike is putting the cards in frames. He puts 6 baseball cards in each frame. What is the total number of frames Miles will need for all of his baseball cards?

A. 5

B. 24

C. 36

D. 180

ITEM 24

Bradley bought 27 feet of rope and cut the rope into 3 equal pieces. How many feet long is each piece of rope?

A. 8

B. 9

C. 24

D. 30

ITEM 25

Amelia has 9 vases. She puts 3 flowers in each vase. What is the total number of flowers in Amelia's vases?

A. 3

B. 6

C. 12

D. 27

ITEM 26

Jonathan spent 30 minutes making bookmarks for his friends. He spent 5 minutes on each bookmark How many bookmarks did Jonathan make in 30 minutes?

A. 6

B. 7

C. 35

D. 150

ITEM 27

Darius is the manager for the Springfield football team. Before the game on Friday night, Darius poured 8 liters of water into each water cooler. If there were 6 water coolers, how many total liters of water did Darius use to fill the coolers?

A. 14

B. 36

C. 48

D. 68

ITEM 28

Lorna bought 32 apples. The apples come in bags of 8. How many bags of apples did Lorna buy?

__4___

ITEM 29

Thomas has 8 boxes of candy. There are 6 pieces of candy in each box. What is the total number of pieces of candy Cade has in his boxes?

_48____

ITEM 30

Maddie has a 42-inch-long piece of wood. She cuts the wood into 6 inch sections. How many 6-inch-long pieces of wood does Maddie have?

A. $42 \div 6 = 7$

B. $42 \div 6 = 8$

C. $6 \div 7 = 42$

D. $6 \div 42 = 8$

ITEM 31

Molly's yard is in the shape of a rectangle. The yard is 30 feet long and 6 feet wide. What is the area, in square feet, of Molly's yard?

A. 80 square feet

B. 90 square feet

C. 180 square feet

D. 36 square feet

Operations and Algebraic Thinking
3.OA.A.04
Items 32 – 43

ITEM 32

Use the number sentence to answer the question.

$63 \div \square = 9$

What number goes in the box to make the number sentence true?

A. 5

B. 6

C. 7

D. 8

ITEM 33

What number will make this equation true?

48 ÷ ____ = 6

A. 7

B. 8

C. 42

D. 54

ITEM 34

What is the number that will make this equation true?

6 × _____ = 42

A. 7

B. 8

C. 36

D. 48

ITEM 35

Determine the unknown number that makes the following equation true.

9 = _____ ÷ 3

A. 3

B. 6

C. 18

D. 27

ITEM 36

What number will make the following equation true?

9 ×___= 63

A. 6

B. 7

C. 54

D. 72

ITEM 37

Which number would make this equation true?

30 ÷____= 5

A. 6

B. 7

C. 35

D. 150

ITEM 38

What number will make the equation 6 x △ = 12 true?

A. 2

B. 3

C. 6

D. 18

ITEM 39

Which equation is true when the blank is replaced with the number 8?

A. __ × 3 = 21

B. 8 × __ = 56

C. 24 ÷ __ = 3

D. __ ÷ 8 = 8

ITEM 40

? × 8 = 64

Which number makes the multiplication equation true?

A. 6

B. 7

C. 8

D. 9

ITEM 41

? x 7 = 42

Which number makes the multiplication equation true?

A. 6

B. 7

C. 35

D. 49

ITEM 42

? × 9 = 54

Which number makes the multiplication equation true?

A. 63

B. 45

C. 6

D. 7

ITEM 43

Select the equation that is true when the number 6 is put into the blank.

A. $40 \div \_\_ = 7$

B. $6 \times \_\_ = 26$

C. $36 \div \_\_ = 6$

D. $\_\_ \times 9 = 48$

Operations and Algebraic Thinking
3.OA.B.05
Items 44 – 49

ITEM 44

Ethan and Miles find the product of 2 x 4 x 5. Ethan multiplies 8 x 5. Miles multiplies a different way. Which of the expressions below could be a correct way that Miles multiplies?

A. 6 x 5

B. 8 x 4

C. 2 x 20

D. 3 x 13

ITEM 45

Julia evaluates (4 x 3) x 2 and gets a product of 24. Abby evaluates 4 x (3 x 2). Which statement is true about the expression Abby evaluated?

A. Abby's expression has a product that is less than 24.

B. Abby's expression has a product that is 4 times greater than 24.

C. Abby's expression has a product that is equal to 24.

D. Abby's expression has a product that is 4 more than 24.

ITEM 46

Caleb wants to find 15 × 4.

Which steps show a method for solving this problem?

A. 15 × 4 = 4 × 15 = (4 ×1) + (4 × 5)

B. 15 × 4 = 4 × 15 = (4 +1) × (4 + 5)

C. 15 × 4 = (10 +5) × 4= (10 +4) × (5 + 4)

D. 15 × 4 = (10 + 5) × 4 = (10 × 4) + (5 × 4)

ITEM 47

Gabe has some marbles. He lines up the marbles to show the product of 3 x 4.

Which of the following shows Gabe's product another way?

A. 

B. 

C. 

D. 

ITEM 48

Which expression shows an equivalent way to represent 8 x 3 x 2?

A. 21 × 2

B. 8 × 6

C. 10 × 3

D. 14 × 3

ITEM 49

Which equation is correct?

A. $3 \times 5 = 3 + 5$

B. $4 \times 8 = 8 \times 4$

C. $9 \times 4 = 4 + 9$

D. $6 \times 3 = 6 \div 3$

Operations and Algebraic Thinking
3.OA.B.06
Items 50 – 53

ITEM 50

Which equation can be used to check the answer to 18 ÷ 3 =?

A. 9 x = 18

B. 18 ÷ 2 =

C. x 3 = 18

D. 18 x 3 =

ITEM 51

Bella wants to find $48 \div 6$.

Which number sentence will help her solve this problem?

A. $48 \times \square = 6$

B. $6 \div \square = 48$

C. $6 \times \square = 48$

D. $6 \div 48 = \square$

ITEM 52

Nicole solved the following equation 36 ÷_____= 4. Which equation can she use to check her answer?

A. ___+ 4 = 36

B. ___× 4 = 36

C. ___÷ 4 = 36

D. ___– 4 = 36

ITEM 53

Jan solved the equation shown.
32 ÷ 4 = ?
Which equation can Jan use to check her answer?

A. 4 + ? = 32

B. 4 × ? = 32

C. 32 + 4 = ?

D. 32 × 4 = ?

Operations and Algebraic Thinking
3.OA.C.07
Items 54 – 62

ITEM 54

Which equation is **true**?

A. $9 \times 5 = 35$

B. $7 \times 6 = 48$

C. $8 \times 7 = 56$

D. $9 \times 8 = 71$

ITEM 55

Marvin is planning a camping trip. He plans on bringing 5 of his friends with him. His mother has given him $50 to buy the drinks and food for everyone the trip.

Use the table to answer the questions below.

Item:	Cost:
Bag of potato chips	$3
Soft Drink	$2
Candy	$1
Juice Box	$2
Hamburger	$5

- Marvin and his 5 friends want to each eat a hamburger and drink a soft drink. How much would it cost to purchase these items for the camping trip?
- Marvin wants to use the remaining amount of money his mother gave him to purchase one more item to take on the camping trip. Which item could be purchased for Martin and his friends?
- Show all of your work

Enter your answer and your work in the space provided.

____(5 + 2) x 5 = 35_____

____potato chips_3 x 5 = 15_____

____35 + 15 = 50_____

ITEM 56

Trinity and six of her friends go to the arcade. She has 19 tokens from her last visit and her mother gives her 44 more to use during this visit. Trinity and each of her friends will have an equal amount of tokens to use for this visit. Two tokens will be used by each person to purchase pizza. The rest of the tokens will be used in the arcade.

- After Trinity and her friends eat pizza, how many tokens will remain?
- How many tokens will Trinity and her friends each be able to use at the arcade?
- Show all of your work.

Enter your answer and your work in the space provided.

____(19 + 44) – 2 = 61 tokens_____

_____61 tokens_____

_____

ITEM 57

What is 4×9?

A. 5

B. 13

C. 36

D. 45

ITEM 58

Find the missing number: 24 ÷ ? = 4

A. 28

B. 20

C. 8

D. 6

ITEM 59

Select the expression that has the same value as 56 ÷ 7.

A. 28 ÷ 4

B. 63 ÷ 9

C. 32 ÷ 4

D. 27 ÷ 3

ITEM 60

Select the three facts that have the same value as 48 ÷ 6.

A. 24÷ 4

B. 64 ÷ 8

C. 32 ÷ 4

D. 27 ÷ 3

E. 72 ÷ 9

__B____ __C____ __E___

ITEM 61

Which expression has the same value as 6 x 4?

A. 9 x 3

B. 3 x 8

C. 5 x 8

D. 7 x 4

ITEM 62

Select the correct equation.

A. $81 \div 9 = 8$

B. $21 \div 3 = 7$

C. $4 \times 6 = 28$

D. $7 \times 5 = 30$

Operations and Algebraic Thinking
3.OA.D.08
Items 63 – 71

ITEM 63

Thomas works 5 days a week at the local library for 4 hours each day. How many hours does he work in 4 weeks?

A. 20 hours

B. 40 hours

C. 60 hours

D. 80 hours

ITEM 64

There are 6 students in the school art club. Each student painted 8 paintings. 29 paintings were sold at the school fair. The remaining paintings were hung in the school library.

How many paintings were hung in the school library?

A. 19

B. 21

C. 43

D. 48

ITEM 65

Jamiya needs a total of 80 hot dog buns for her birthday party. She already has 48 hot dog buns. If hot dog buns come in packs of 8, write and solve an equation or equations to show how many more packages of hot dog buns Jamiya will need.

Show all the steps you used to solve the equation or equations.

Enter your equation or equations and your work below.

(80-48)÷8=h

32÷8=h

h=4

OR

80-48 = 32

h=32÷8

h=4

OR

80-48=32

32 ÷8= 4

Jamiya will need to buy 4 more packages of hot dog buns.

ITEM 66

Mr. Council plans on using red, green, blue, and yellow tape to create learning centers in his classroom. Each roll of tape has a different length.

- The red tape is 55 feet long.
- The green tape is 25 feet long.
- The blue tape is 15 feet long.

Mr. Council needs a total of 110 feet of tape to create the learning centers in his room.

Write an equation or equations to show how much yellow tape Mr. Council needs to create the centers.
What is the total length of yellow tape needed to complete the task?
Show your work or provide an explanation of the process you used.

Enter your equation or equations, the length of the yellow tape, and your work or explanation below.

____55 + 25 + 15 = 95 feet_____

____110 – 95 = 15 feet yellow tape_____

_____

ITEM 67

King runs 6 miles a day. His goal is to run 42 miles. King reasons that after running 5 days, he has run 32 miles. Therefore, he only has to run 10 more miles to reach his goal.

- Explain why King is incorrect in his reasoning.
- Explain how King could correct his reasoning.
- Find the correct number of miles King needs to run to reach his goal.

Enter your answer and your explanations below.

____6 x 5 = 30 miles not 32 miles_____

____42 – 30 = 12 miles remaining _____

_____6 x 2 = 12_____

ITEM 68

Cameron's family was traveling to see family on vacation. On Monday, they traveled 387 miles. On Tuesday, they traveled 293 miles. On Wednesday, they traveled 89 miles. Which estimate **best** shows how many miles they traveled over the three days?

A. 600 miles

B. 1,000 miles

C. 500 miles

D. 800 miles

ITEM 69

Zamarion's class needs 12 candy bars for a science project. Zamarion brings 2 candy bars to class. Her 3 friends each bring 2 candy bars to class. How many more candy bars does the class need?

__4___

ITEM 70

Gracelyn made four pans of brownies. She cuts each pan into 20 brownies. Gracelyn's brothers eat 36 brownies. How many brownies are left?

A. 12

B. 44

C. 54

D. 60

ITEM 71

Dwan receives $250 for his birthday. His favorite video games cost $30 each. If Dwan buys 4 video games, how much birthday money will he have left?

A. $130

B. $220

C. $280

D. $284

Operations and Algebraic Thinking
3.OA.D.09
Items 72 – 75

ITEM 72

Kyron organized the apps on his phone. He created a pattern to find the total number of apps on his phone. 4, 8, 12, 16, 20, 24…
Kyron says that he created the pattern by placing the same number of apps in each folder.

- Describe how to find the number Kyron used to create the pattern.
- Describe how you would use multiplication to create the same pattern.
- Can 33 be included in this pattern? Explain why or why not.

Enter your descriptions and explanation below

___4_____

___1 x 4 = 4; 2 x 4 = 8; etc_____

___33 is not divisible by 4_____

ITEM 73

Kevin multiplied a number by 3. The product of the two numbers was odd. Which could be the other number that Kevin multiplied?

A. 4

B. 6

C. 8

D. 9

ITEM 74

Grace added a number to 6. The sum was even. Which could be the other number Grace added?

A. 3

B. 4

C. 5

D. 7

ITEM 75

Tori makes the following number pattern. 3, 6, 9, 12,....
If Tori continues this pattern, what will be true about the 7th number in the pattern.

A. The number will be even.

B. The number will be odd.

C. The number will be 3 more than 12.

D. The number will be 7 more than 12.

Number and Operations in Base Ten
3.NBT.A.01
Items 76 – 89

ITEM 76

The school kitchen served 346 hot lunches on Tuesday.

To the nearest ten, how many hot lunches were served?

A. 300

B. 340

C. 350

D. 400

ITEM 77

A farmer owns 842 cows. What is 842 rounded to the nearest ten?

A. 800

B. 840

C. 850

D. 900

ITEM 78

Mount Washington is 6,288 feet tall. What is 6,288 rounded to the nearest hundred?

A. 6,000

B. 6,200

C. 6,300

D. 7,000

ITEM 79

Use the chart to help round 32 to the nearest 10.

20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49

A. 30

B. 31

C. 35

D. 40

ITEM 80

Kinley's teacher wants to order 468 prizes to put in the treasure box. The order form says she needs to round the number to the nearest 10.

How many prizes will Kinley's teacher have to order?

A. 400 prizes

B. 460 prizes

C. 470 prizes

D. 500 prizes

ITEM 81

I am a number that rounds to 30. One of my digits is 4. Which number could I be?

A. 24

B. 34

C. 41

D. 44

ITEM 82

There are 673 trees in a park.

What is 673 rounded to the nearest 100?

A. 600

B. 670

C. 680

D. 700

ITEM 83

There are 127 cars in a parking lot.

What is 127 rounded to the nearest hundred?

A. 100

B. 120

C. 130

D. 200

ITEM 84

Use the hundreds chart to answer the question.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

What number is the nearest ten to the shaded number?

A. 40

B. 41

C. 45

D. 50

ITEM 85

Use the hundreds chart to answer the question.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Sandy shaded a number on the hundreds chart. What number is the nearest ten to Sandy's number?

A. 80

B. 85

C. 88

D. 90

ITEM 86

Which equation best shows a way to estimate the total of 253 + 28 using rounding?

A. 200 + 20 = 220

B. 200 + 30 = 230

C. 300 + 20 = 320

D. 300 + 30 = 330

ITEM 87

When rounded to the nearest 10, which **three** numbers round to 360?

A. 366

B. 400

C. 361

D. 355

E. 359

__C___ ___D__ __E___

ITEM 88

Which equation best shows a way to estimate the total of 304 + 85 using rounding?

A. 200 + 90 = 290

B. 300 + 80 = 380

C. 300 + 90 = 390

D. 400 + 90 = 490

ITEM 89

Round 986 to the nearest ten.

A. 80

B. 900

C. 980

D. 990

Number and Operations in Base Ten
3.NBT.A.02
Items 90 – 104

ITEM 90

A donut shop reports the numbers of three types of donuts baked on Saturday morning,

Types of Donuts

Plain	**78**
Chocolate	**342**
Sprinkles	**260**

How many more sprinkled donuts than plain donuts were baked on Saturday morning?

A. 264

B. 338

C. 182

D. 281

ITEM 91

Find the missing number, n.

505 – 389 = *n*

A. 116

B. 216

C. 226

D. 284

ITEM 92

A garden store had 264 rose plants. The store sold 157 of the rose plants.

The garden store used the expression 264 – 157 to determine the number of rose plants that were left. How many rose plants were left?

A. 103

B. 107

C. 113

D. 117

ITEM 93

A farmer sold 178 red apples and 249 green apples.

The farmer used the expression 178 + 249 to determine the number of apples she sold. How many apples were sold in all?

A. 317

B. 327

C. 417

D. 427

ITEM 94

Find the difference: 990 - 9

A. 881

B. 981

C. 991

D. 999

ITEM 95

What is the sum of the expression below?

179 + 25

A. 194

B. 204

C. 429

D. 1914

ITEM 96

If 11 - 5 = 6, then what does 110 - 50 equal?

A. 6

B. 50

C. 60

D. 140

ITEM 97

The difference between two three-digit number is 162.

What might the two numbers be?

A. 714 and 676

B. 776 and 614

C. 793 and 641

D. 741 and 623

ITEM 98

Eastside Elementary School has 329 boxes of crayons in the storage closet.

They also have 179 boxes of crayons in the art room.

What is the total number of boxes of crayons that Eastside Elementary School has?

A. 498

B. 500

C. 507

D. 508

ITEM 99

Subtract: 705 – 283

A. 422

B. 428

C. 522

D. 582

ITEM 100

Add: 126 + 493

A. 519

B. 520

C. 619

D. 629

ITEM 101

Subtract: 835 – 297

A. 662

B. 638

C. 548

D. 538

ITEM 102

Which expression could be used to find the value of 367 + 458?

A. 3 + 6 + 7 + 4 + 5 + 8

B. 30 + 40 + 60 + 50 + 7 + 8

C. 300 + 400 + 6 + 5 + 7 + 8

D. 300 + 400 + 60 + 50 + 7 + 8

ITEM 103

Solve the equation. Enter your answer below. 954 - 786

__168___

ITEM 104

Which expression could be used to find the value of 573 + 782?

A. 5+7+3+7+8+2

B. 500+70+3+700+80+2

C. 50+70+3+70+80+2

D. 500+700+70+80+30+20

Number and Operations in Base Ten
3.NBT.A.03
Items 105 – 114

ITEM 105

Casey and his 6 cousins go to the state fair. They each buy a ride pass for $30.

What is the total cost of the passes?

A. $36

B. $37

C. $180

D. $210

ITEM 106

What is the product of 60 x 5?

A. 65

B. 110

C. 300

D. 605

ITEM 107

Juan bought lemons for a lemonade stand. The lemons came in bags of 60. He bought 6 bags.

How many lemons did Juan buy?

A. 66 lemons

B. 120 lemons

C. 360 lemons

D. 420 lemons

ITEM 108

3 x 60 can be represented as which of the expressions listed?

A. (3 ? 6) + 10

B. (3 ? 6) + (3 ? 10)

C. (3 ? 6) ? 10

D. (3 ? 6) + (3 ? 0)

ITEM 109

Which of these is equivalent to 7 × 40?

A. 7 groups of 4

B. 110

C. 28 tens

D. 40 groups of ten

ITEM 110

What is 30 x 6?

A. 5

B. 36

C. 90

D. 180

ITEM 111

What is 40 × 8?

A. 5

B. 48

C. 120

D. 320

ITEM 112

Multiply.

$60 \times 4 = ?$

A. 64

B. 100

C. 240

D. 280

ITEM 113

Enter the number that makes the equation true. Enter your answer below. 6 × 80 = _____

_480____

ITEM 114

Which expression shows another way to find the product of 3 x 60?

A. 3 x 6

B. 3 x 10 x 6

C. 3 x 6 + 10

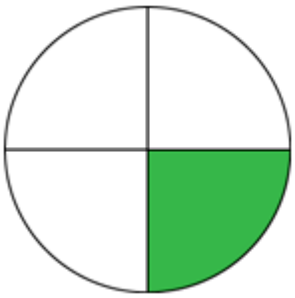
D. 3 x 10 + 6

Number and Operations – Fractions
3.NF.A.01
Items 115 – 124

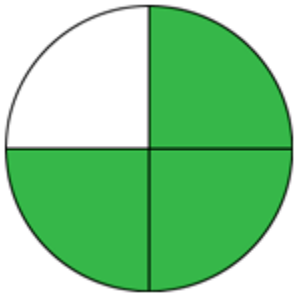
ITEM 115

Which figure shows $\frac{3}{4}$ shaded?

A. 

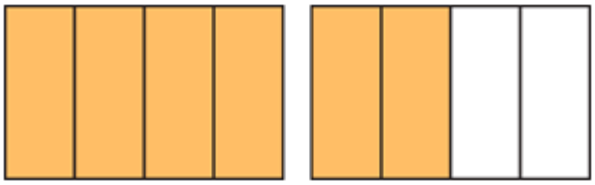
C. 

B. 

D. 

ITEM 116

Which fraction is shown by the shaded region?



A. $\frac{6}{8}$

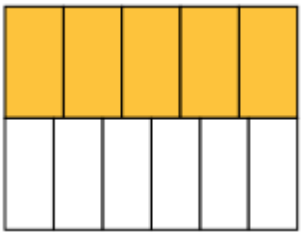
B. $\frac{6}{4}$

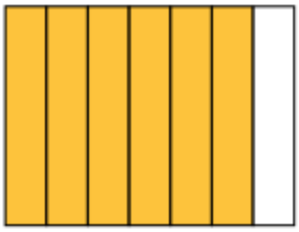
C. $\frac{5}{4}$

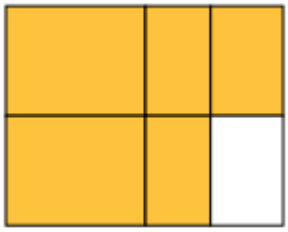
D. $\frac{6}{2}$

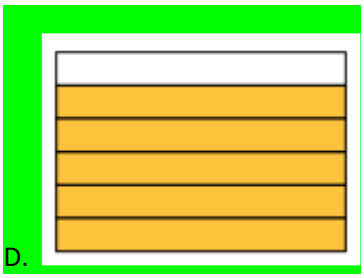
ITEM 117

Which picture shows $\frac{5}{6}$ of the rectangle shaded?

A. 

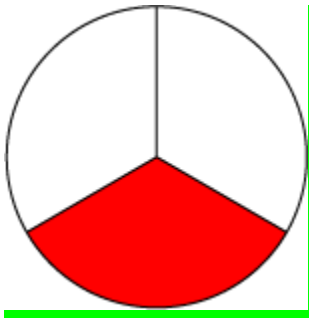
C. 

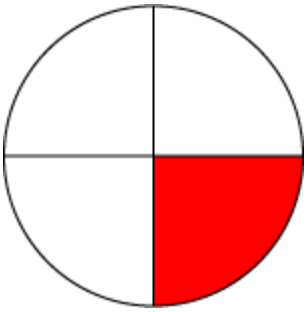
B. 

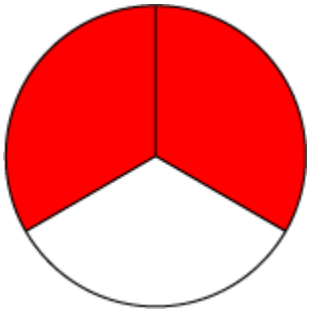
D. 

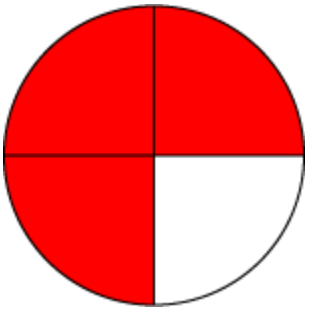
ITEM 118

In which circle is $\frac{1}{3}$ shaded?

A. 

C. 

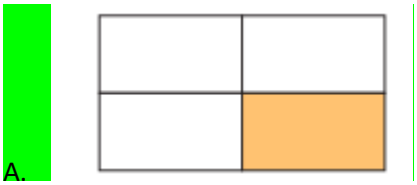
B. 

D. 

ITEM 119

Loki cut a rectangle into fourths. Which rectangle shows $\frac{1}{4}$ shaded?

A.



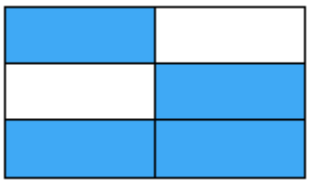
B.

C.

D.

ITEM 120

Use the model below to answer the question.



What fraction of the model is shaded?

A. $\frac{2}{4}$

B. $\frac{4}{6}$

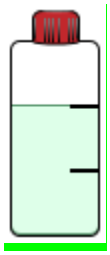
C. $\frac{4}{2}$

D. $\frac{6}{4}$

ITEM 121

Tim's shampoo bottle is about $\frac{2}{3}$ full?

Which picture shows the amount of shampoo in Tim's bottle?

A. 

C. 

B. 

D. 

ITEM 122

Isabelle folded a piece of paper into equal parts and wrote her vocabulary words in each block. Use the picture of Isabelle's paper to answer the question.

mammal	pupa
larva	chrysalis
insect	thorax
cocoon	

What fraction of the blocks was **not** used?

A. $\frac{3}{10}$

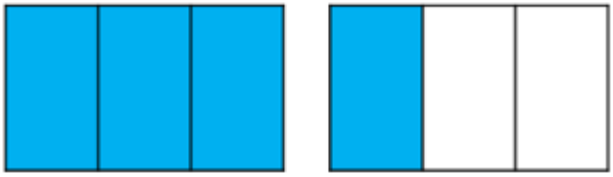
B. $\frac{3}{7}$

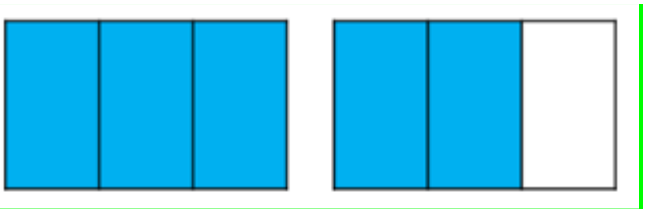
C. $\frac{7}{10}$

D. $\frac{7}{3}$

ITEM 123

Which figure shows $\frac{5}{3}$ shaded?

A. 

B. 

C. 

D. 

ITEM 124

A pan of brownies is divided into 6 equal pieces. Marlee eats 5 of the pieces. What fraction of the whole pan of brownies does Marlee eat?

A. $\frac{1}{6}$

B. $\frac{1}{5}$

C. $\frac{2}{6}$

D. $\frac{5}{6}$

Number and Operations – Fractions
3.NF.A.02a
Items 125 – 134

ITEM 125

Which letter shows the position of $\frac{1}{6}$ on the number line?

A. E

B. F

C. G

D. H

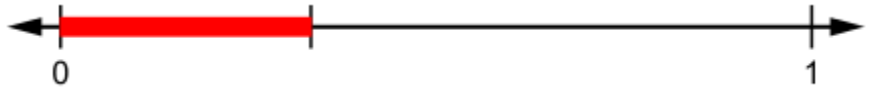
ITEM 126

Which number line shows a length of $\frac{1}{2}$?

A.

B.

C.

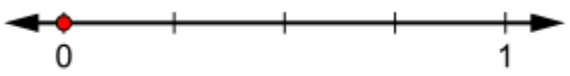


D.

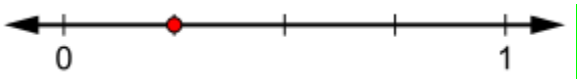
ITEM 127

Adam ate $\frac{1}{4}$ of his candy bar. Choose the number line that correctly plots $\frac{1}{4}$.

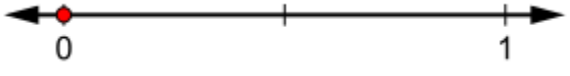
A.



B.



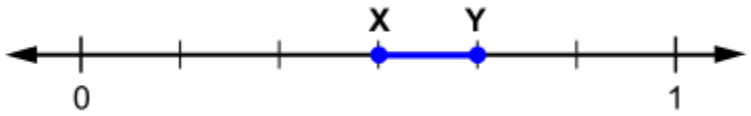
C.



D.

ITEM 128

Anita ran part of a 1-mile relay race. The part of the race she ran is shown on the number line below.



Anita started at point X and finished at point Y. What fraction of the 1-mile relay race did she run?

A. $\frac{1}{6}$

B. $\frac{1}{5}$

C. $\frac{2}{7}$

D. $\frac{4}{6}$

ITEM 129

Which unit fraction is shown on this number line?

A. $\frac{1}{3}$

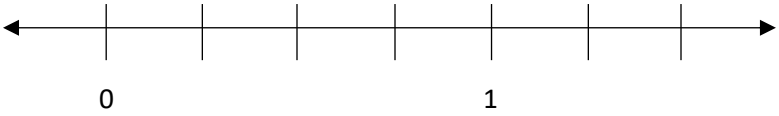
B. $\frac{1}{5}$

C. $\frac{1}{4}$

D. $\frac{1}{2}$

ITEM 130

What unit fraction is shown on this number line?



A. $\frac{1}{5}$

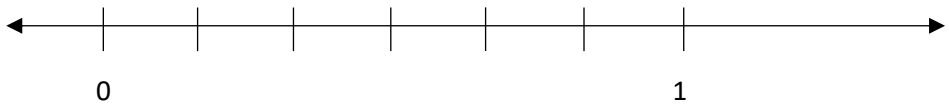
B. $\frac{1}{6}$

C. $\frac{1}{4}$

D. $\frac{1}{2}$

ITEM 131

What unit fraction is shown on this number line?



A. $\frac{1}{8}$

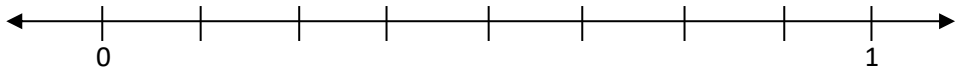
B. $\frac{1}{6}$

C. $\frac{1}{4}$

D. $\frac{1}{7}$

ITEM 132

What unit fraction shown is shown on this number line?



A. $\frac{1}{8}$

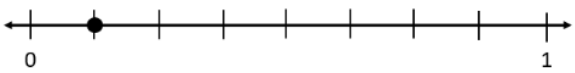
B. $\frac{1}{6}$

C. $\frac{1}{4}$

D. $\frac{1}{9}$

ITEM 133

Use the number line to answer the question.



What fraction does the point represent?

A. $\frac{1}{7}$

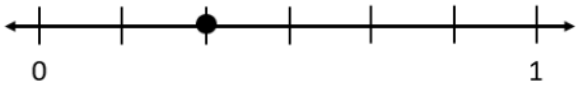
B. $\frac{1}{8}$

C. $\frac{8}{1}$

D. $\frac{7}{8}$

ITEM 134

Use the number line to answer the question.



What fraction does the point represent?

A. $\frac{6}{2}$

B. $\frac{3}{6}$

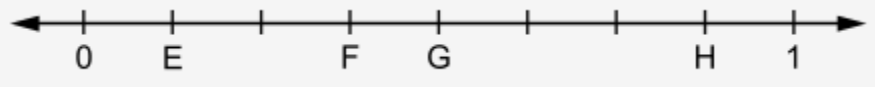
C. $\frac{2}{6}$

D. $\frac{1}{6}$

Number and Operations – Fractions
3.NF.A.02b
Items 135 – 144

ITEM 135

Which letter shows the point where $\frac{4}{8}$ is located on the number line?



A. E

B. F

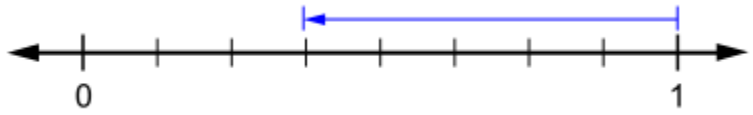
C. G

D. H

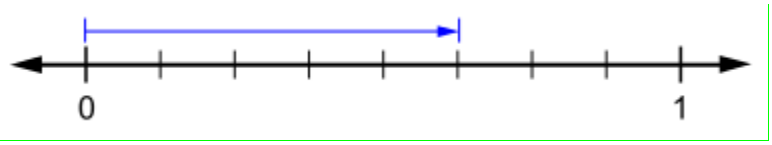
ITEM 136

Cassi drew an arrow above a number line. The arrow is $\frac{5}{8}$ of a unit long. She drew the arrow so it is pointing at the mark for $\frac{5}{8}$. Which arrow could be the one Cassi drew?

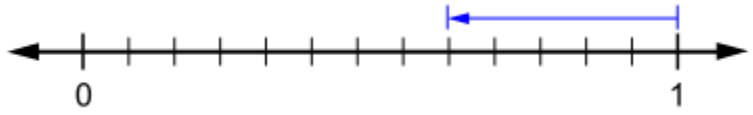
A.



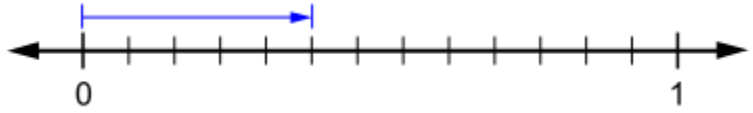
B.



C.



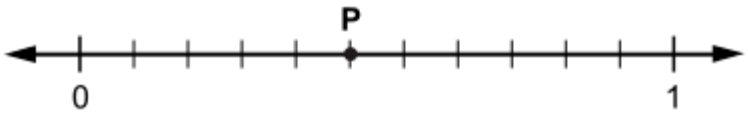
D.



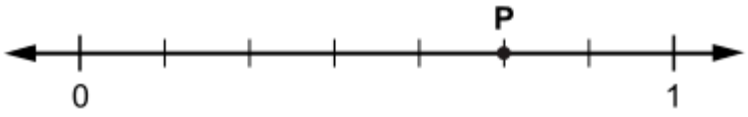
ITEM 137

Paula finished $\frac{5}{6}$ of her homework. Which number line marks the fraction of Paula's homework that is finished with point P?

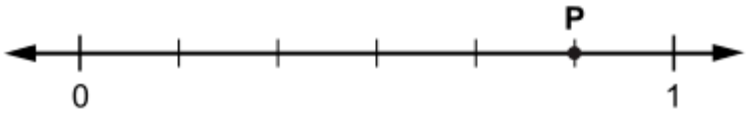
A.



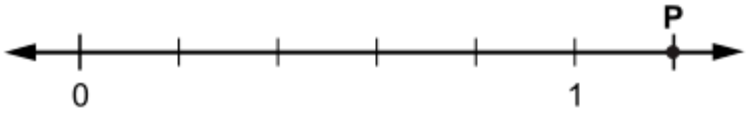
B.



C.

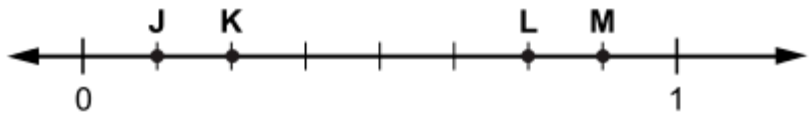


D.



ITEM 138

Carmen has 4 tomatoes she will eat this week. The weight, in pounds, of each tomato is shown on the number line below.



The first tomato Carmen will eat weighs $\frac{2}{8}$ of a pound. Which point on the number line represents the first tomato Carmen will eat?

A. J

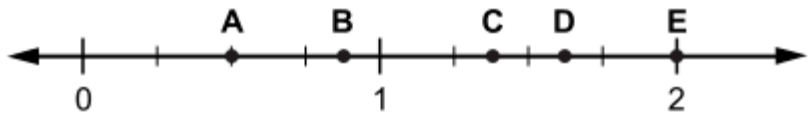
B. K

C. L

D. M

ITEM 139

Jason is measuring the lengths of different insects, in inches. He plots the lengths on the number line below.



The length of the first insect Jason measured is $\frac{6}{8}$ of an inch. Between which two points on the number line is the location of the length of the first insect?

A. points A and B

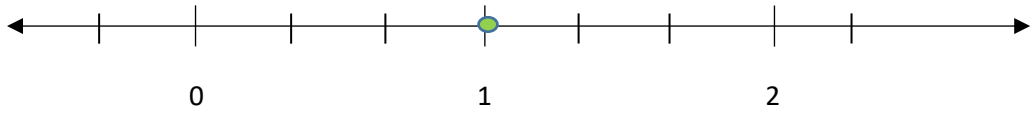
B. points B and C

C. points C and D

D. points D and E

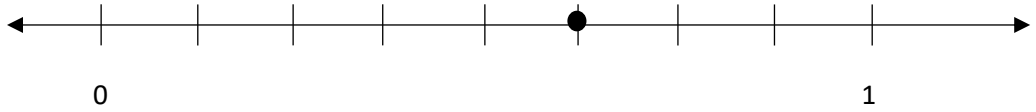
ITEM 140

Plot $\frac{3}{3}$ on the number line.



ITEM 141

What fraction is represented by the point on the number line?



A. $\frac{4}{8}$

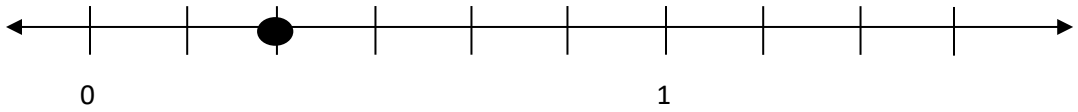
B. $\frac{5}{4}$

C. $\frac{5}{8}$

D. $\frac{5}{5}$

ITEM 142

Which fraction is represented by the point on the number line?



A. $\frac{2}{8}$

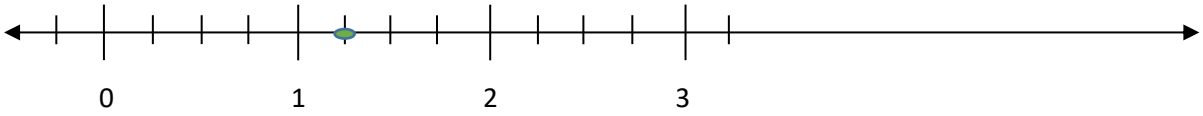
B. $\frac{2}{6}$

C. $\frac{1}{6}$

D. $\frac{2}{2}$

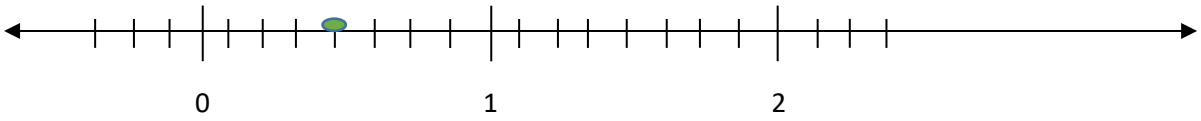
ITEM 143

Plot the point $\frac{5}{4}$.



ITEM 144

Plot a point at $\frac{4}{8}$ on the number line.

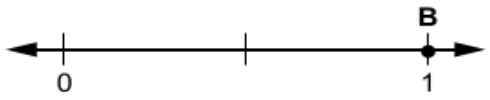
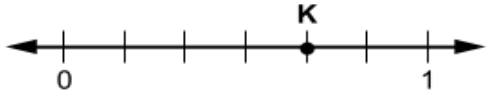
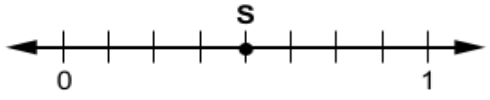


Number and Operations – Fractions
3.NF.A.03a
Items 145 – 150

ITEM 145

There are four baseball teams. Each team has played some of its games this season. The fractions of games won are shown in the table below. The fractions of games won are also represented by the number lines in the table.

Baseball Teams

Team	Fractions of Games Won	Number Line
Bison	$\frac{2}{2}$	
Eagles	$\frac{2}{4}$	
Knights	$\frac{4}{6}$	
Sharks	$\frac{4}{8}$	

Two teams have won the same fraction of games. Which sentence explains how the number lines show this?

A. The Bison and the Eagles are each 2 spaces from 0.

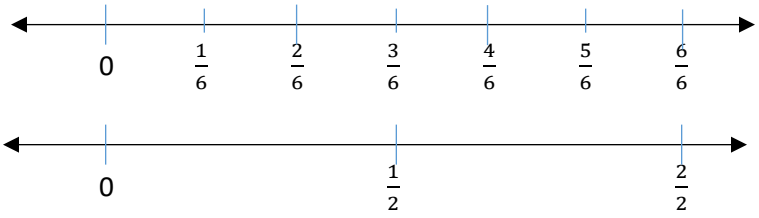
B. The Knights and the Sharks are each 4 spaces from 0.

C. The Eagles and the Knights are each the same distance from 1.

D. The Eagles and the Sharks are each the same distance from 0 and 1.

ITEM 146

Which fraction is equivalent to $\frac{1}{2}$?



A. $\frac{1}{6}$

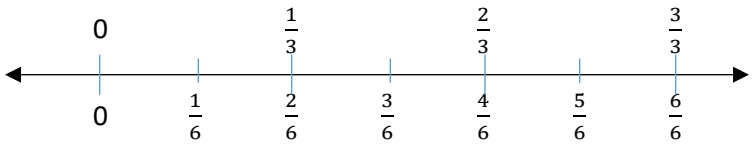
B. $\frac{3}{6}$

C. $\frac{2}{6}$

D. $\frac{6}{6}$

ITEM 147

Which fraction is equivalent to $\frac{1}{3}$?



A. $\frac{1}{6}$

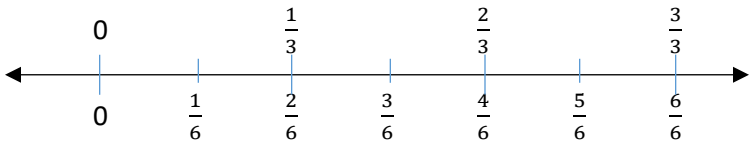
B. $\frac{3}{6}$

C. $\frac{2}{6}$

D. $\frac{2}{3}$

ITEM 148

Which fraction is equivalent to $\frac{2}{3}$?



A. $\frac{2}{6}$

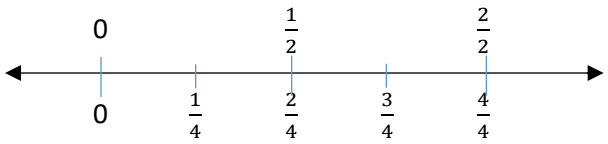
B. $\frac{3}{6}$

C. $\frac{4}{6}$

D. $\frac{3}{3}$

ITEM 149

Which fraction is equivalent to $\frac{1}{2}$?



A. $\frac{1}{4}$

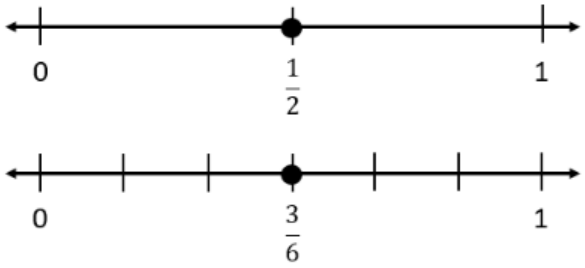
B. $\frac{2}{4}$

C. $\frac{3}{4}$

D. $\frac{2}{2}$

ITEM 150

Use the number lines to answer the question.



Which comparison about the two points on the number lines is true?

A. $\frac{1}{2} > \frac{3}{6}$

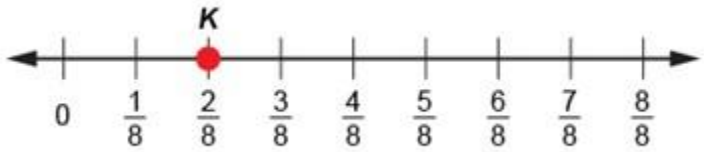
B. $\frac{1}{2} < \frac{3}{6}$

C. $\frac{1}{2} = \frac{3}{6}$

Number and Operations – Fractions
3.NF.A.03b
Items 151 – 158

ITEM 151

Mr. Davis draws a number line and labels point *K.*



Which fraction is equivalent to the location of point *K*?

A. $\frac{1}{4}$

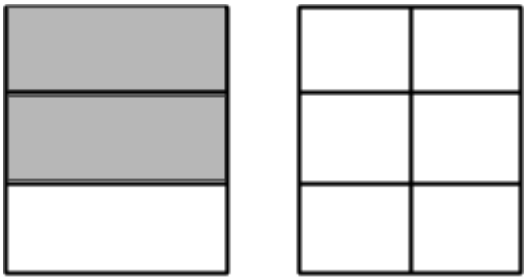
B. $\frac{2}{4}$

C. $\frac{1}{3}$

D. $\frac{1}{2}$

ITEM 152

Use the fraction model to find a fraction equivalent to $\frac{2}{3}$.



A. $\frac{4}{6}$

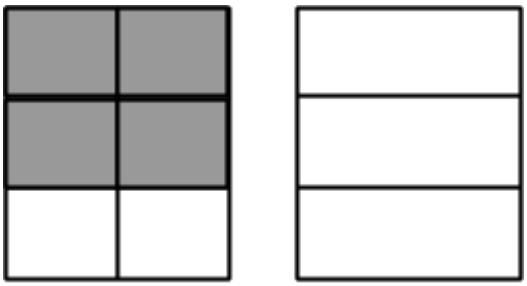
B. $\frac{2}{3}$

C. $\frac{2}{6}$

D. $\frac{4}{3}$

ITEM 153

Use the fraction model to find a fraction equivalent to $\frac{4}{6}$.



A. $\frac{2}{6}$

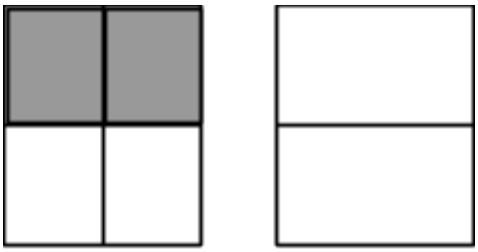
B. $\frac{4}{6}$

C. $\frac{1}{3}$

D. $\frac{2}{3}$

ITEM 154

Use the fraction model to find a fraction equivalent to $\frac{2}{4}$.



A. $\frac{1}{2}$

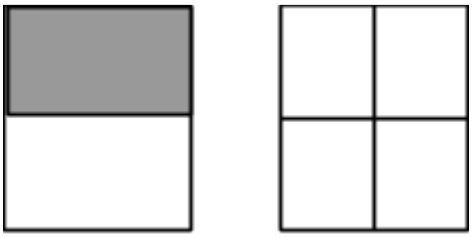
B. $\frac{1}{4}$

C. $\frac{2}{4}$

D. $\frac{2}{2}$

ITEM 155

Use the fraction model to select a fraction equivalent to $\frac{1}{2}$.



A. $\frac{1}{2}$

B. $\frac{1}{4}$

C. $\frac{2}{4}$

D. $\frac{2}{2}$

ITEM 156

Which **two** fractions are equivalent to the fraction shaded in the model?

A. $\frac{1}{4}$

B. $\frac{3}{6}$

C. $\frac{4}{1}$

D. $\frac{4}{4}$

E. $\frac{1}{2}$

__B___ __E___

ITEM 157

Which fraction is equal to $\frac{4}{5}$?

A. $\frac{1}{3}$

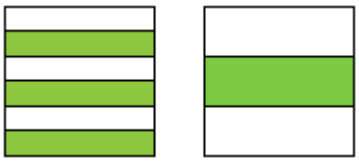
B. $\frac{3}{4}$

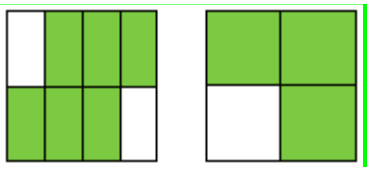
C. $\frac{4}{9}$

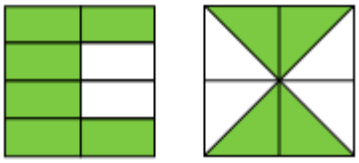
D. $\frac{8}{10}$

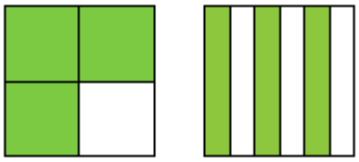
ITEM 158

Which pair of squares has shaded parts which represent the same fraction?

A. 

B. 

C. 

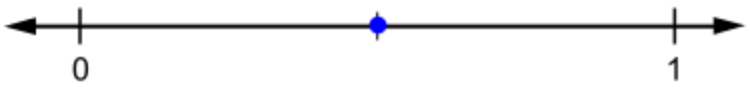
D. 

Number and Operations – Fractions
3.NF.A.03c
Items 159 – 165

ITEM 159

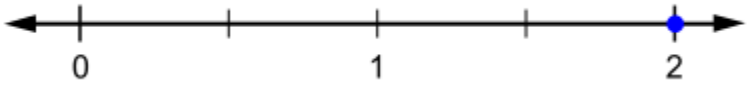
Vince covered $\frac{2}{1}$ cakes with frosting. He marked a point on a number line to show how many cakes he covered with frosting. Which number line shows the point Vince marked?

A.

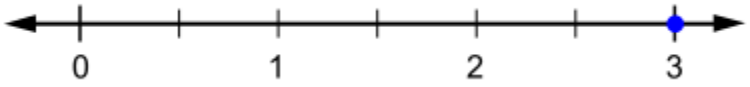


B.

C.



D.



ITEM 160

Liam broke a candy bar into equal pieces. He gave away $\frac{3}{3}$ of it. Which number is equal to the fraction of the candy bar Liam gave away?

A. 1

B. 3

C. 6

D. 9

ITEM 161

Which equation is true?

A. $4 = \frac{1}{4}$

B. $6 = \frac{1}{6}$

C. $3 = \frac{3}{3}$

D. $2 = \frac{1}{2}$

ITEM 162

What fraction is equivalent to 3?

A. $\frac{1}{5}$

B. $\frac{3}{1}$

C. $\frac{3}{3}$

D. $\frac{2}{3}$

ITEM 163

Select the fraction that is equivalent to 5.

A. $\frac{5}{1}$

B. $\frac{1}{5}$

C. $\frac{5}{5}$

D. $\frac{2}{5}$

ITEM 164

Which fraction is equivalent to the number 3?

A. $\frac{1}{3}$

B. $\frac{3}{5}$

C. $\frac{3}{1}$

D. $\frac{0}{3}$

ITEM 165

Which fraction is equivalent to the number 6?

A. $\frac{6}{6}$

B. $\frac{6}{1}$

C. $\frac{1}{6}$

D. $\frac{1}{1}$

Number and Operations – Fractions
3.NF.A.03d
Items 166 – 178

ITEM 166

Randy and Chrissy eat some of the blueberries from a package for a snack. Randy eats $\frac{1}{4}$ of the blueberries from the package. Chrissy eats $\frac{1}{3}$ of the blueberries from the package. Which statement about the amount of blueberries Randy and Chrissy each eat is true?

A. Since the two fractions do not refer to the same whole, it is not possible to tell who eats more blueberries.

B. Since fractions that have different denominators cannot be compared, it is not possible to tell who eats more blueberries.

C. Chrissy eats more blueberries than Randy because 1 part out of 3 parts is larger than 1 part out of 4 parts.

D. Randy eats more blueberries than Chrissy because 1 part out of 4 parts is larger than 1 part out of 3 parts.

ITEM 167

Choose the symbol that correctly completes the comparison.

$\frac{1}{2}$ ___ $\frac{1}{8}$

A. <

B. >

C. =

ITEM 168

Compare and determine the correct comparison.

A. 1/4 is greater than 1/5

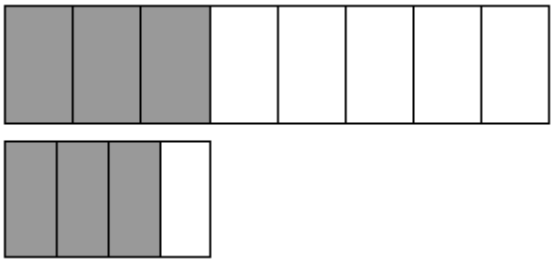
B. 1/4 is less than 1/5

C. 1/4 is equal to 1/5

ITEM 169

Kofi used a model to compare two fractions. He wrote this sentence.

"The fraction $\frac{3}{8}$ is larger than the fraction because the denominator of 8 is larger than the denominator of 4." His fraction model is shown below.



Kofi is incorrect in his reasoning.

- Explain why Kofi is incorrect in his reasoning about the model.
- Write a correct comparison of $\frac{3}{8}$ and $\frac{3}{4}$ using symbols <, >, or =.
- Explain why your reasoning is correct.

Enter your comparison and your explanations in the space provided.

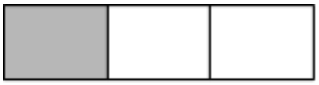
_____

$\frac{3}{4} > \frac{3}{8}$ _____

_____

ITEM 170

Use the model below to help you select the correct answer.



A. $\frac{1}{8} > \frac{1}{3}$

B. $\frac{1}{8} = \frac{1}{3}$

C. $\frac{1}{3} < \frac{1}{8}$

D. These fractions cannot be compared because the wholes are not the same.

ITEM 171

Rai'leigha said that $\frac{1}{5}$ and $\frac{1}{2}$ are equal because their numerators are equal. Rai'leigha is incorrect in her reasoning.

- Explain why Rai'leigha's reasoning is incorrect.
- Write a correct comparison for $\frac{1}{5}$ and $\frac{1}{2}$ using < or >.
- Explain why your reasoning is correct.

Enter your comparison and your explanations below.

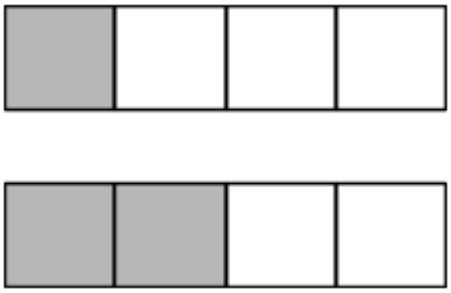
_____

_____$\frac{1}{2} > \frac{1}{5}$_____

_____

ITEM 172

Use the fraction model below to help you select the correct symbol to complete the comparison $\frac{1}{2}$? $\frac{1}{4}$.



A. <

B. >

C. =

ITEM 173

Select the correct symbol to complete the comparison $\frac{2}{6} ? \frac{4}{6}$.

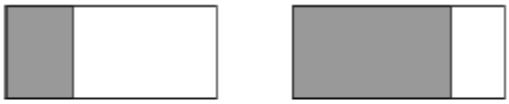
A. $<$

B. $>$

C. $=$

ITEM 174

Ethan and Kyvan both buy a candy bar that are the same size. Ethan eats $\frac{3}{8}$ of his candy bar. Kyvan eats $\frac{3}{4}$ of his candy bar. Use the visual fraction model below to help you determine which comparison is correct?



Ethan's Candy Bar

Kyvan's Candy Bar

A. $\frac{3}{8} > \frac{3}{4}$

B. $\frac{3}{4} = \frac{3}{8}$

C. $\frac{3}{8} < \frac{3}{4}$

D. $\frac{3}{4} < \frac{3}{8}$

ITEM 175

The bakery made two cakes that were exactly the same size. One cake was chocolate and the other cake was vanilla. Jyrin bought $\frac{1}{3}$ of the chocolate cake. Ta'Janae bought $\frac{1}{6}$ of the vanilla cake. Which comparison is true?

A. $\frac{1}{3} > \frac{1}{6}$

B. $\frac{1}{3} = \frac{1}{6}$

C. $\frac{1}{6} > \frac{1}{3}$

D. $\frac{1}{6} = \frac{1}{3}$

ITEM 176

Asia's family ate $\frac{1}{2}$ of her birthday cake. Jaycee's family ate $\frac{1}{2}$ of her birthday cake. Which comparison is true based on the visual model below?

Asia's Birthday Cake

Jaycee's Birthday Cake

A. Asia's $\frac{1}{2}$ < Jaycee's $\frac{1}{2}$

B. Asia's $\frac{1}{2}$ > Jaycee's $\frac{1}{2}$

C. Jaycee's $\frac{1}{2}$ = Asia's $\frac{1}{2}$

D. Jaycee's $\frac{1}{2}$ > Asia's $\frac{1}{2}$

ITEM 177

Which comparison is true?

A. $\frac{5}{6} = \frac{5}{8}$

B. $\frac{3}{4} < \frac{3}{8}$

C. $\frac{1}{6} > \frac{1}{8}$

D. $\frac{3}{6} = \frac{2}{6}$

ITEM 178

Which fraction is less than the fraction shown by the shaded circles?

A. $\frac{2}{8}$

B. $\frac{2}{6}$

C. $\frac{2}{3}$

D. $\frac{4}{6}$

Measurement and Data
3.MD.A.01
Items 179 – 180

ITEM 179

Look at the time shown on the analog clock.

Which digital clock matches this time?

A. 8 : 54

B. 9 : 14

C. 9 : 54

D. 11 : 09

ITEM 180

Fuller started cleaning his room at 1:05 P.M. He finished cleaning his room at 1:37 P.M. How many minutes did Fuller spend cleaning his room?

A. 32

B. 33

C. 37

D. 42

Measurement and Data
3.MD.A.01a
Items 181 – 185

ITEM 181

Mario gets home at 2:52 pm. Which clock shows 2:52?

A. 

C. 

B. 

D. 

ITEM 182

What time is shown on this clock?

A. 10:38

B. 10:42

C. 11:38

D. 11:42

ITEM 183

Jan started biking at 10:23 A.M. and stopped at 11:06 A.M. How long did Jan bike?

A. 17 minutes

B. 29 minutes

C. 31 minutes

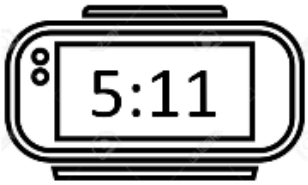
D. 43 minutes

ITEM 184

Look at the time shown on the analog clock below.

Which digital clock shows the same time?

A. 

B. 

C. 

D. 

ITEM 185

Kiley's swim practice begins at the time shown on the clock.

What time does Kiley's swim practice begin?

A. 5:40

B. 5:43

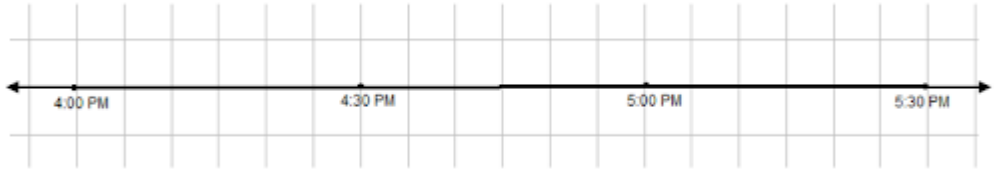
C. 6:40

D. 6:43

Measurement and Data
3.MD.A.01b
Items 186 – 195

ITEM 186

On Monday, Sally went to ballet class at 4:00 p.m. and then had tap class right afterwards. Ballet class was 45 minutes long and tap class was 30 minutes long. At what time did Sally finish tap class on Monday? Use the number line to help you solve the problem.



A. 4:45 P.M

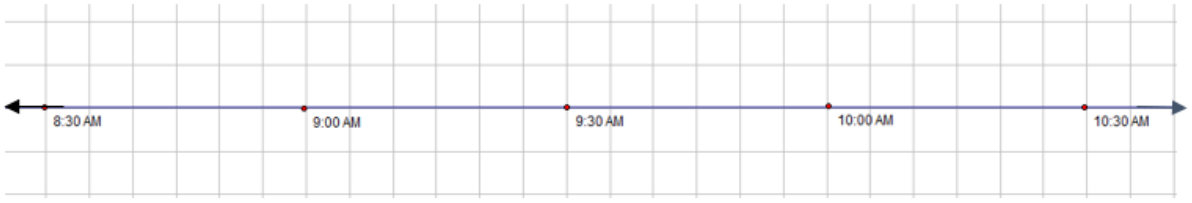
B. 5:15 P.M.

C. 5:30 P.M.

D. 5:45 P.M.

ITEM 187

Every Sunday Brileigh visits her grandmother for breakfast at 8:30 a.m. Brileigh stays at her grandmother's house for 45 minutes, then walks next door to the library where she reads for one hour. At what time does she finish reading at the library? Use the number line to help you solve the problem.



A. 9:30 A.M.

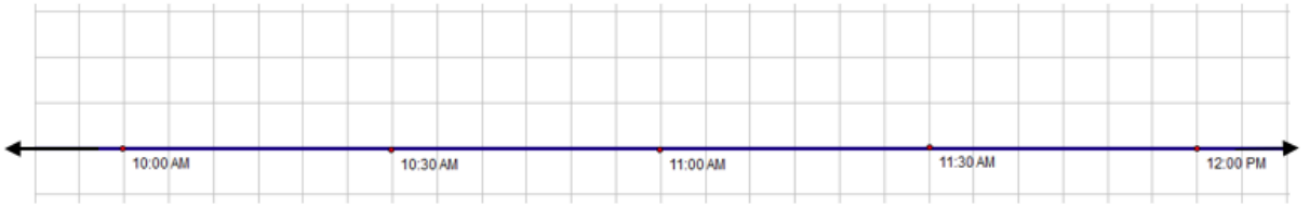
B. 10:15 A.M.

C. 10:30 A.M.

D. 10:45 A.M.

ITEM 188

Every Saturday, a family volunteers their services to their community by working for 45 minutes at the food bank, then for 60 minutes at the animal shelter. If the family begins volunteering at 10:00 a.m. at the food bank, then what time does the family finish volunteering at the animal shelter? Use the number line to help you solve the problem.



A. 11:00 a.m.

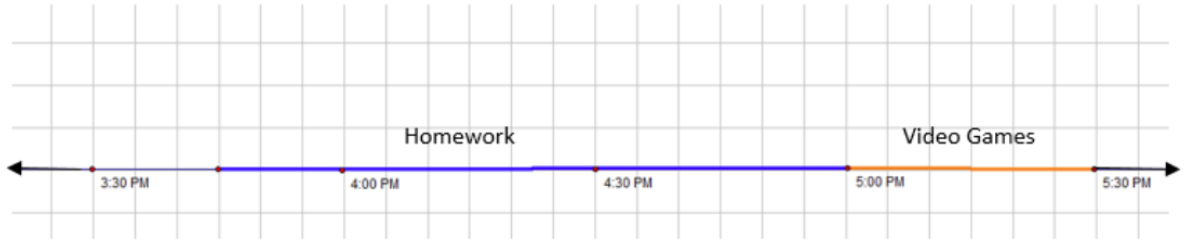
B. 11:30 a.m.

C. 11:45 a.m.

D. 12:00 p.m.

ITEM 189

The blue bar on the number line shows the amount of time a student spends completing homework. The orange bar on the number line shows the amount of time a student spends playing video games.



Exactly how many fewer minutes does the student spend playing video games than the student spends completing homework? Enter your answer below.

__45___

ITEM 190

The yellow bar on the number line shows the amount of time a student spends doing chores. The green bar on the number line shows the amount of time a student spends reading.

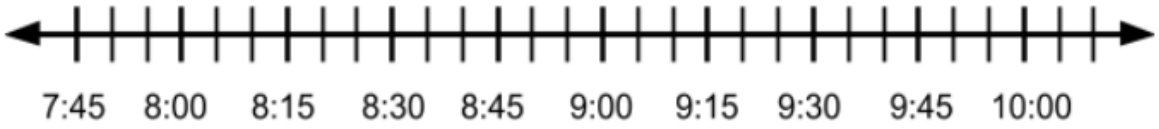
Exactly how many more minutes does the student spend reading than the student spends doing chores? Enter your answer below.

_15____

ITEM 191

Jason started watching videos online at 7:46 p.m. The first video he watched was 19 minutes long. The next two videos he watched were both 30 minutes long. The last video he watched was 16 minutes long.

Using the number line, calculate the time Jason finished watching videos to the nearest quarter or half hour.



A. 8:45 p.m.

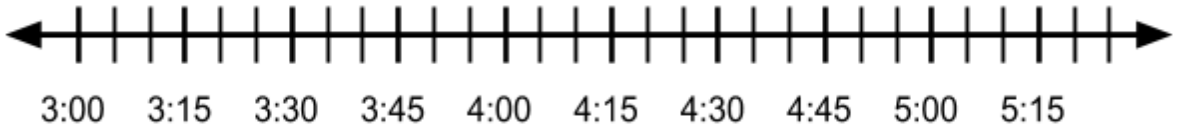
B. 9:00 p.m.

C. 9:45 p.m.

D. 9:15 p.m.

ITEM 192

The bell rang to end school at 3:00 p.m. Elizabeth had cheerleader practice for 47 minutes. It took her 11 minutes to walk home from school. She worked on her homework for the next 44 minutes until her mother called her for supper. Using the number line, calculate the time Elizabeth ate supper to the nearest quarter or half hour.



A. 4:00 p.m.

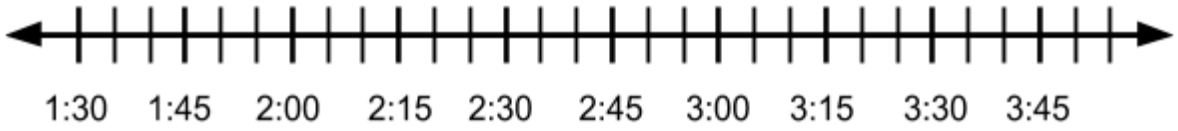
B. 4:15 p.m.

C. 4:45 p.m.

D. 5:00 p.m.

ITEM 193

Kiara's birthday celebration started at 2:00 p.m. She spent 46 minutes at the trampoline park. Eating cake and opening presents took 29 minutes. She went back to the trampoline park for 25 more minutes. Using the number line, calculate the time Kiara's birthday celebration ended to the nearest quarter hour.



A. 3:15 p.m.

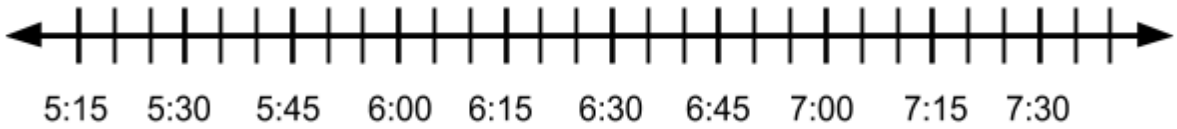
B. 3:30 p.m.

C. 3:45 p.m.

D. 4:00 p.m.

ITEM 194

Baseball practice started at 5:30 p.m. The team warmed up for 14 minutes. They took batting practice for 64 minutes. The team practiced fielding for 20 minutes. Using the number line, calculate the time the team finished practice to the nearest quarter hour.



A. 6:45 p.m.

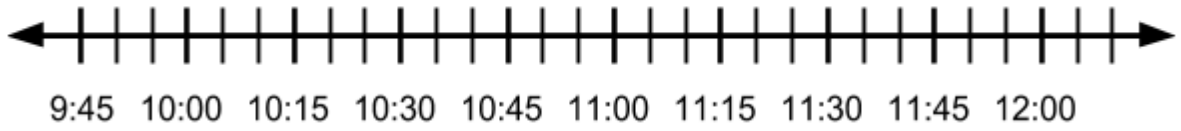
B. 7:00 p.m.

C. 7:15 p.m.

D. 7:30 p.m.

ITEM 195

Alana started working on her chores at 10:30 a.m. It took her 16 minutes to fold the clothes. She washed, dried, and put away the dishes in 29 minutes. Alana picked up limbs from the yard in 26 minutes. Using the number line, calculate the time Alana finished her chores to the nearest quarter or half hour.



A. 11:00 a.m.

B. 12:00 p.m.

C. 11:15 a.m.

D. 11:45 a.m.

Measurement and Data
3.MD.A.01c
Items 196 – 205

ITEM 196

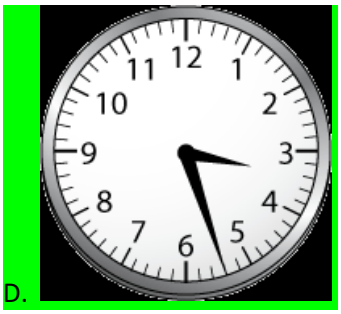
This clock shows the time when Rob starts swimming.

Rob swims for 22 minutes. Which clock shows the time when Rob stops swimming?

A. 

C. 

B. 

D. 

ITEM 197

Use the clock to answer the question.

The clock shows the time Julie's friend comes over to play. She stays for 35 minutes.

Which clock shows the time Julie's friend leaves?

A.

C.

B.

D.

ITEM 198

Barney left his house at 5:00 pm. He returned at 7:00 pm. How long was Barney gone?

A. 2 hours

B. 5 hours

C. 7 hours

D. 14 hours

ITEM 199

Dennis started cleaning his room at 3:35. He finished 1 hour 15 minutes later. What time did he finish?

A. 4:15

B. 4:50

C. 5:15

D. 5:50

ITEM 200

Ms. Roberts put some food in the oven at 6:06. This clock shows the time she took the food out of the oven.

How long was the food in the oven?

A. 10 minutes

B. 14 minutes

C. 20 minutes

D. 26 minutes

ITEM 201

A plane takes off at 10:30 a.m. The plane lands at 2:00 p.m. How much time passed between taking off and landing?

A. 4 hours

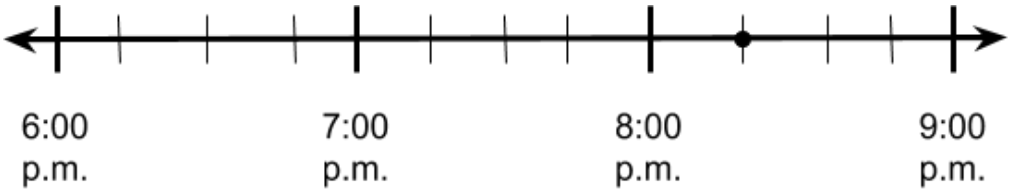
B. 3 hours 30 minutes

C. 3 hours

D. 4 hours and 30 minutes

ITEM 202

Orianna talked to her friend, Harley, on the telephone. The point on the line represents when the phone call began.



Part A
Orianna began reading her book 45 minutes before she called Harley. At what time did Orianna begin reading her book? Use the number line to help explain your thinking.

Part B
Harley went to bed 30 minutes after her phone call with Orianna began. At what time did Harley go to bed? Use the number line to explain your thinking.

Enter your answers and your explanations below.

A. Answer: 7:30 p.m.

Explanation: 8:15 p.m. (time when the phone call began) – 45 minutes = 7:30 p.m.

B. Answer: 8:45 p.m.

Explanation: 8:15 p.m. (time when the phone call began + 30 minutes = 8:45 p.m.

ITEM 203

Jonah spends 15 minutes eating breakfast each morning, 10 minutes walking his dog, and 20 minutes riding the bus to school.

How many total minutes does it take for Jonah to complete all of his morning activities?

A. 30

B. 40

C. 45

D. 55

ITEM 204

Veronika put muffins into the oven at 1:06 pm. She took the muffins out of the oven at 1:28 pm. How long, in minutes, did the muffins bake in the oven?

A. 12

B. 22

C. 28

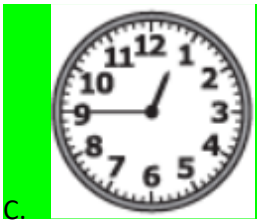
D. 32

ITEM 205

Bill's lunch break starts at 12:20 P.M. He finishes eating lunch 25 minutes later. Which clock shows the time that Bill will finish his lunch break?

A. 

B. 

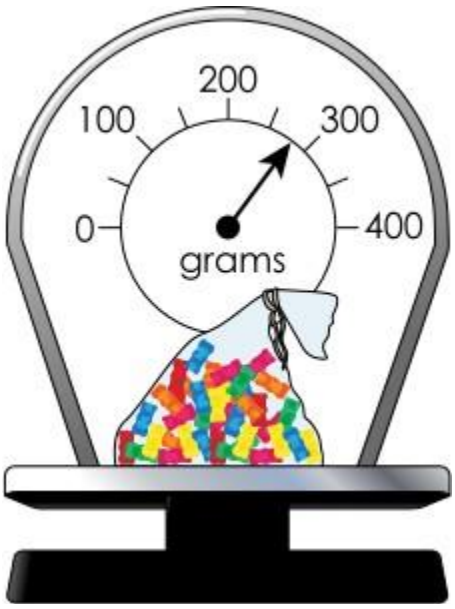
C. 

D. 

Measurement and Data
3.MD.A.02
Items 206 – 218

ITEM 206

Braylen is buying gummy bears at the grocery store. He places his bag of gummy bears on the scale shown below.



What is the **best** estimate of the mass, in grams, of Braylen's gummy bears?

A. 250

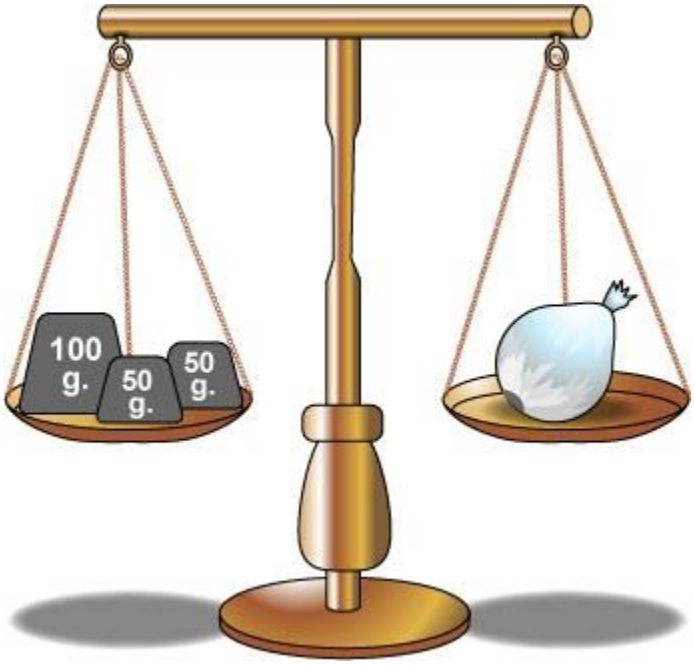
B. 275

C. 325

D. 350

ITEM 207

Larry found the mass of an onion on this balance scale.



What was the mass, in grams, of the onion?

A. 50 grams

B. 100 grams

C. 150 grams

D. 200 grams

ITEM 208

Mark uses the scale to find the mass of this toy car.

What is the mass, in grams, of the toy car?

A. 10 grams

B. 11 grams

C. 12 grams

D. 13 grams

ITEM 209

Mark uses the scale to find the mass of this toy car.

If he adds another toy car to the scale that has a mass of 4 grams, what mass will the scale show?

A. 7 grams

B. 11 grams

C. 14 grams

D. 15 grams

ITEM 210

Mark uses the scale to find the mas of this toy car.

Mark has a toy truck that has a mass of 15 grams. How much more is the mass of the truck than the mass of the car?

A. 4 grams

B. 6 grams

C. 11 grams

D. 26 grams

ITEM 211

Scott drinks 4 liters of juice every day. How many liters of juice did he drink in 20 days?

A. 16 liters

B. 20 liters

C. 24 liters

D. 80 liters

ITEM 212

Martin buys bags of sugar. Each bag has a mass of 30 grams. What is the mass of five bags of sugar?

A. 15

B. 35

C. 120

D. 150

ITEM 213

There are 7 jugs of apple juice on the shelf. Each jug contains 4 liters. How many total liters of apple juice are on the shelf?

A. 10

B. 11

C. 24

D. 28

ITEM 214

Together, container A and B hold 674 milliliters of water. If container A holds 392 milliliters of water, how many milliliters does container B hold?

A. 282

B. 322

C. 966

D. 1,066

ITEM 215

Samuel has 4 large boxes. Each box has the same mass. One box has a mass of 7 kilograms. What is the total mass, in kilograms, of all Samuel's boxes?

A. 7

B. 11

C. 24

D. 28

ITEM 216

Jonathan mails two packages from the post office. One package weighs 386 grams, and the other package weighs 495 grams. What is the total weight, in grams, of the two packages?

A. 761

B. 771

C. 871

D. 881

ITEM 217

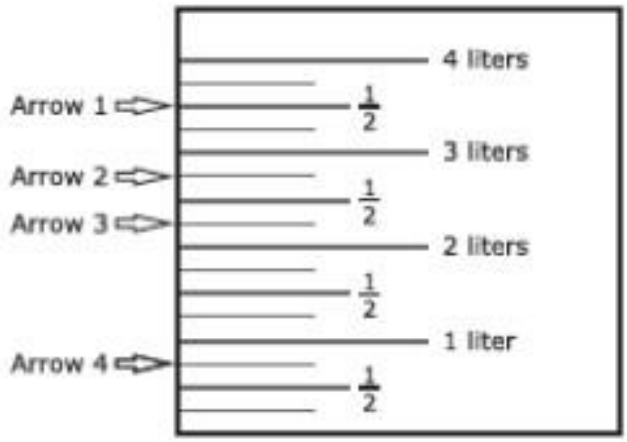
Jim buys a soccer ball and a basketball at a sports store. The mass of the soccer ball is 843 grams and the mass of the basketball is 972 grams. In grams, how much greater is the mass of the basketball than the mass of the soccer ball?

Enter your answer below.

__129___

ITEM 218

Zachary pours about 2 liters of water into a pitcher to make lemonade. Which arrow shows about how much water Zachary poured into the pitcher?



A. Arrow 1

B. Arrow 2

C. Arrow 3

D. Arrow 4

Measurement and Data
3.MD.B.03
Items 219 – 226

ITEM 219

Use the graph to answer the question.

The students at Washington Elementary School collected bins of objects that can be recycled. The graph shows how many bins each grade collected.

How many bins did the students collect all together?

A. 4

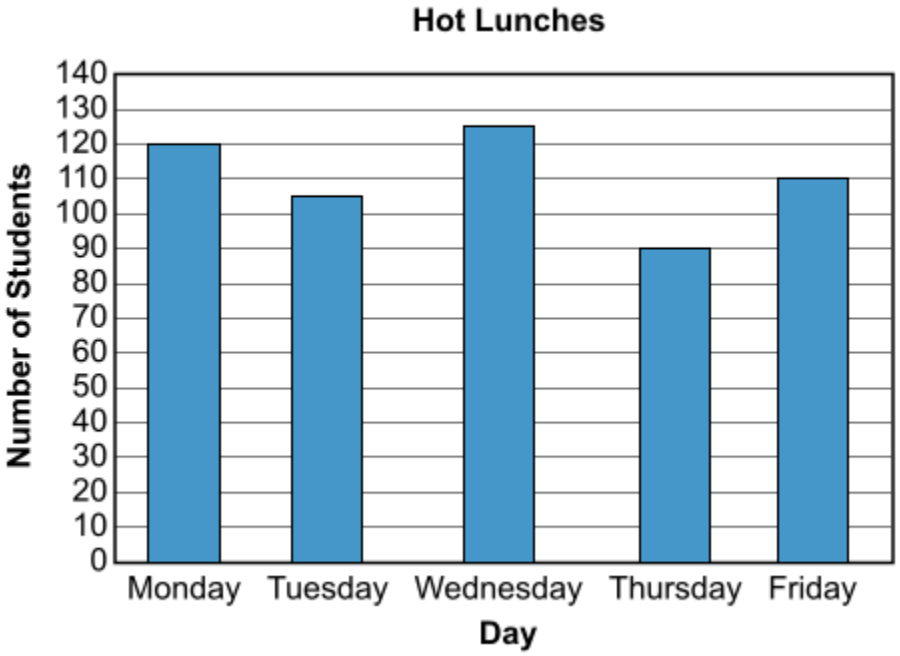
B. 10

C. 40

D. 90

ITEM 220

Use the bar graph below to answer the question.



The bar graph shows the number of students who bought a hot lunch each day last week. How many more students bought a hot lunch on Monday than on Thursday?

A. 15

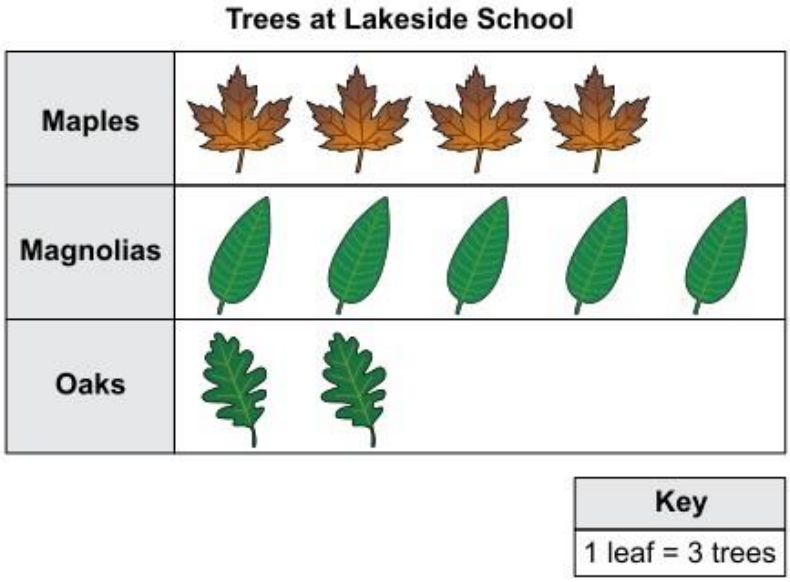
B. 20

C. 30

D. 35

ITEM 221

Use the picture graph to answer the question.



The graph shows how many trees are at Lakeside School. In the graph, each leaf represents 3 trees.

How many more magnolias are there than oaks?

A. 3

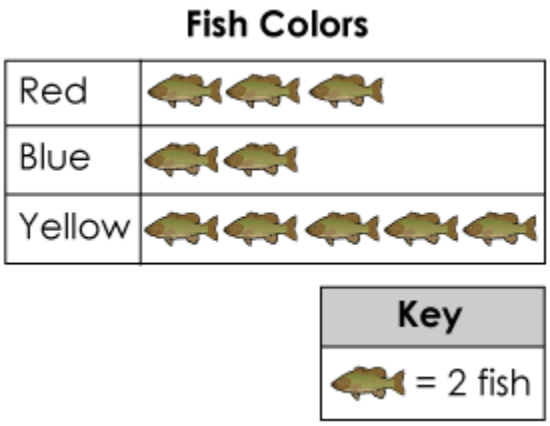
B. 7

C. 9

D. 15

ITEM 222

Rita has a fish tank. The colors of her fish are shown in the pictograph.



How many more yellow fish than blue fish does Rita have?

A. 3

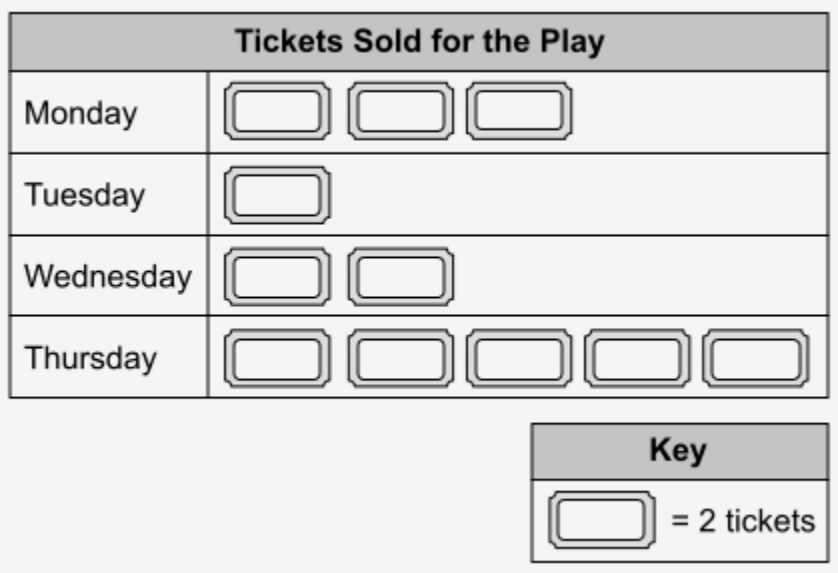
B. 5

C. 6

D. 14

ITEM 223

Kaylee's class sold tickets for the school play for 4 days.



How many more tickets did the class sell on Thursday than on Wednesday?

A. 2

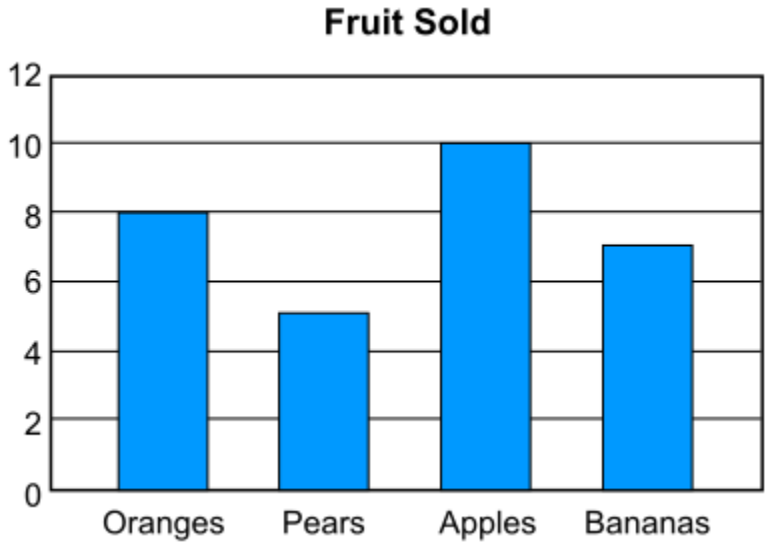
B. 3

C. 5

D. 6

ITEM 224

Ms. Stanley sells fruit. This bar graph shows different kinds of fruit she sold one day.



How many more bananas did she sell than pears?

A. 1

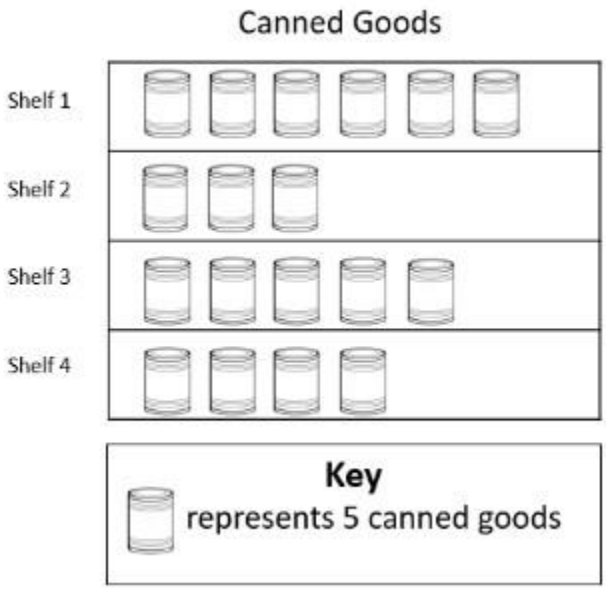
B. 2

C. 5

D. 12

ITEM 225

The supermarket has four shelves of canned goods. The picture graph shows how many canned goods are on each shelf.



How many more canned goods are on shelf 1 than on shelf 2?

A. 3

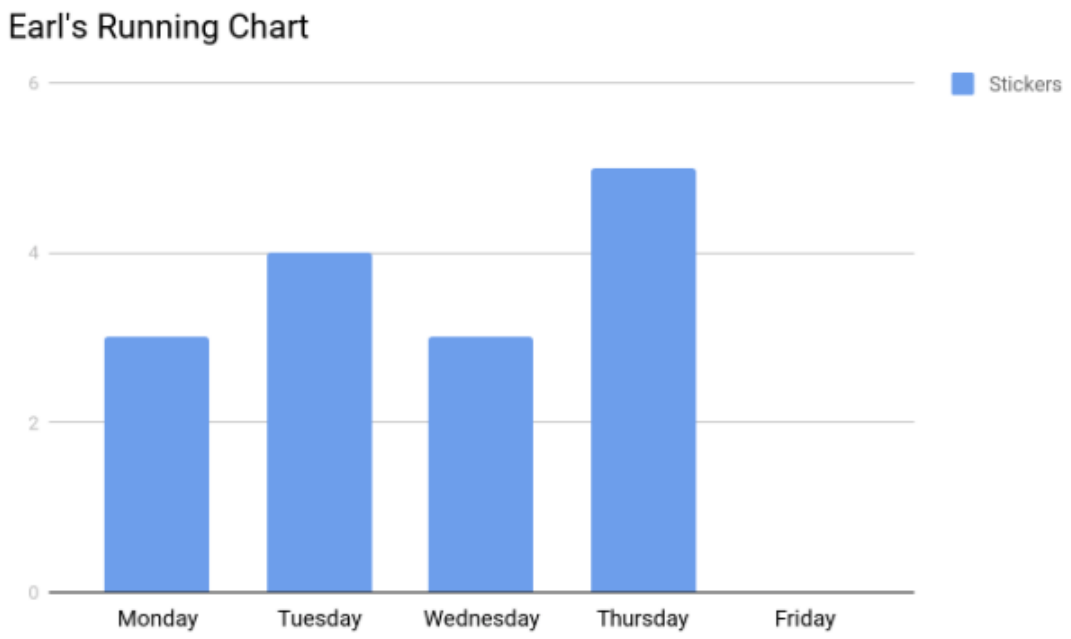
B. 9

C. 15

D. 45

ITEM 226

Earl gets a sticker for every 5 minutes he spends running each day. He keeps track of the stickers he earns every day with the graph as shown.



Earl spends a total of 95 minutes running during the week. How many stickers does he get on Friday?

A. 3

B. 4

C. 5

D. 6

Measurement and Data
3.MD.B.04
Items 227 – 233

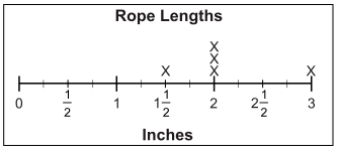
ITEM 227

Use the inch ruler to answer the question.

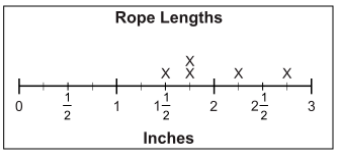
Use the pictures to answer the question.

J.T. measures these ropes to the nearest $\frac{1}{4}$ inch. Which line plot correctly shows their lengths?

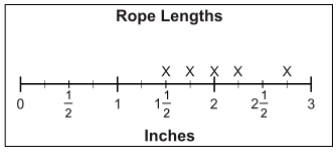
A.



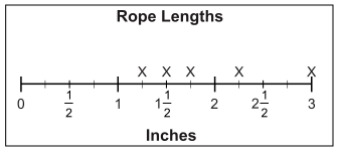
B.



C.



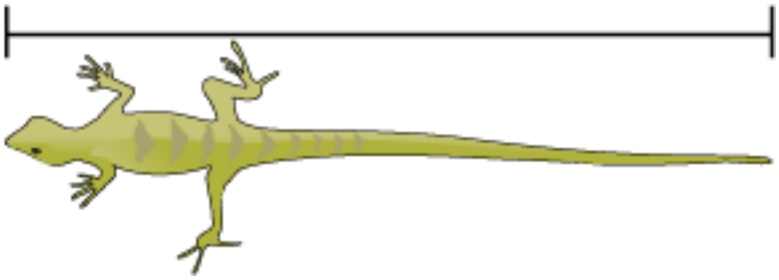
D.



ITEM 228

Use the inch ruler to answer the question.

How long is this lizard?



A. 3 inches

B. $3\frac{1}{2}$ inches

C. 4 inches

D. $4\frac{1}{2}$ inches

ITEM 229

Use the inch ruler to answer this question

Olivia found this feather.

How long is the feather?

A. $1\frac{1}{2}$ inches

B. 2 inches

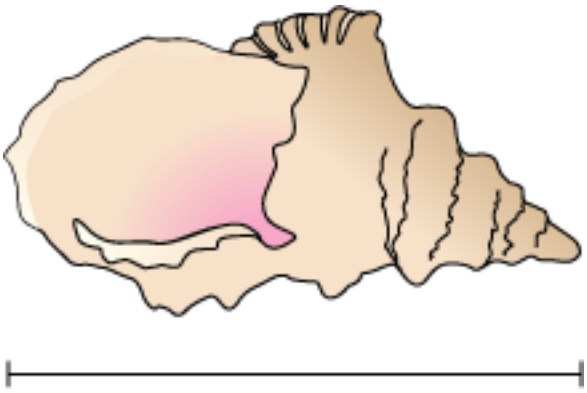
C. $2\frac{1}{2}$ inches

D. 3 inches

ITEM 230

Use the inch ruler to answer this question.

How long is this seashell?



A. $2\frac{3}{4}$ inches

B. 3 inches

C. $3\frac{1}{4}$ inches

D. $3\frac{1}{2}$ inches

ITEM 231

Use the picture below and your ruler to answer this question.

To the nearest quarter inch, how long is this nail?

A. $2\frac{1}{4}$ inches

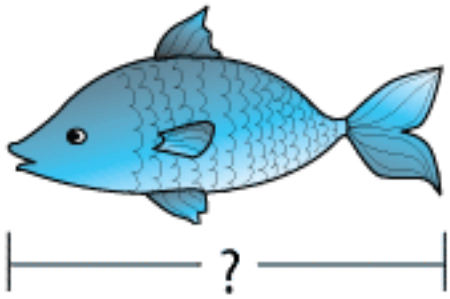
B. $2\frac{3}{4}$ inches

C. $3\frac{1}{4}$ inches

D. $3\frac{3}{4}$ inches

ITEM 232

Use the picture below and your ruler to answer this question.



To the nearest quarter inch, how long is this fish?

A. $2\frac{1}{4}$ inches

B. $2\frac{3}{4}$ inches

C. $3\frac{1}{4}$ inches

D. $3\frac{3}{4}$ inches

ITEM 233

Use the picture below and your ruler to answer this question.

How long is this chain? Measure to the nearest quarter-inch.

A. $3\frac{1}{4}$ inches

B. $3\frac{1}{2}$ inches

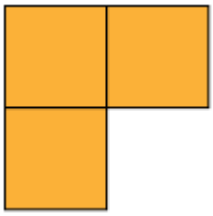
C. $3\frac{3}{4}$ inches

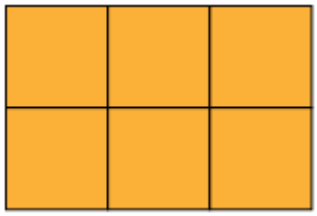
D. 4 inches

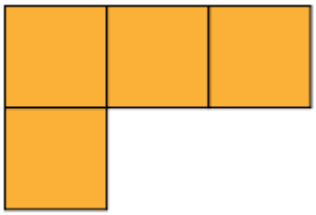
Measurement and Data
3.MD.C.05
Items 234 – 241

ITEM 234

Which figure has an area of 8 square units?

A. 

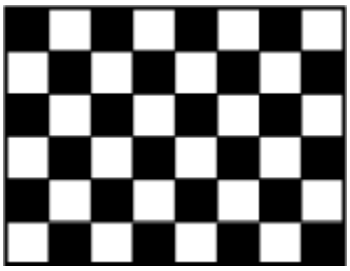
C. 

B. 

D. 

ITEM 235

This picture shows Mr. Hill's bathroom floor covered with black tiles and white tiles. Each tile is 1 square foot.



If Mr. Hill counts all the square tiles, which measurement attribute would he be finding?

A. length

B. width

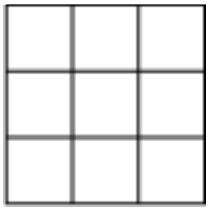
C. perimeter

D. area

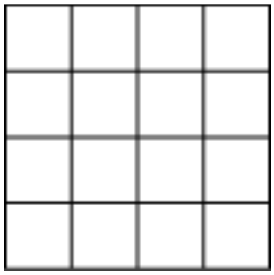
ITEM 236

Jen cut these 4 rectangles out of graph paper. Which rectangle has an area of 12 square units?

A. 

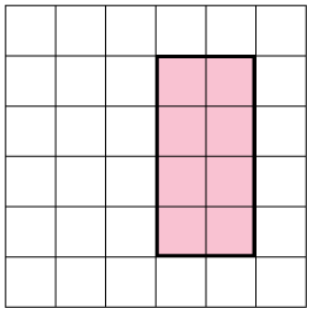
B. 

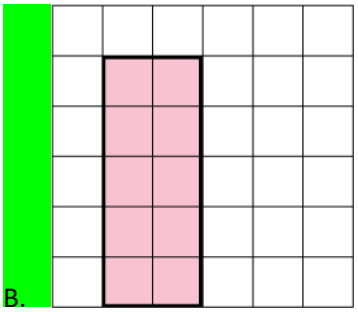
C. 

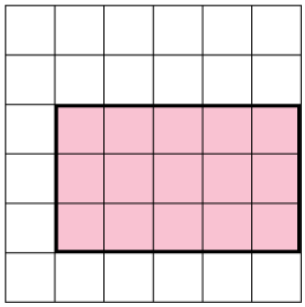
D. 

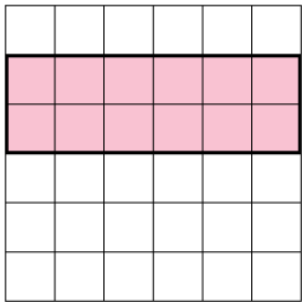
ITEM 237

Olivia has graph paper with 1-centimeter squares. She draws a rectangle with an area of 10 square centimeters. Which rectangle did Olivia draw?

A. 

B. 

C. 

D. 

ITEM 238

Jackson's bedroom is 10 feet long and 12 feet wide. Jackson wants to find the area of the floor. Which unit of measure should he use for the area?

A. yards

B. square feet

C. cubic feet

D. inches

ITEM 239

Which unit can be used to express the area of a garden?

A. meters

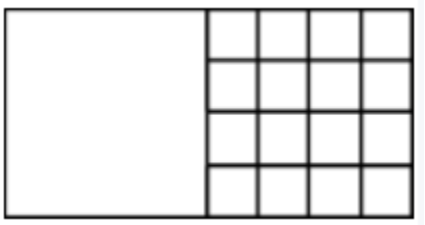
B. square meters

C. cubic meters

D. millimeters

ITEM 240

Half of the rectangle has been tiled with unit squares. What is the total area of the large rectangle?



A. 12 square units

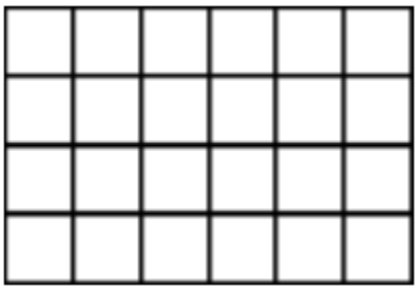
B. 32 square units

C. 27 square units

D. 16 square units

ITEM 241

Allyssa uses unit squares to tile a piece of paper. What is the area of the piece of paper?



A. 24 square units

B. 10 square units

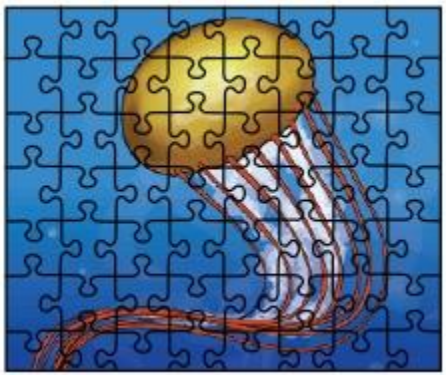
C. 20 square units

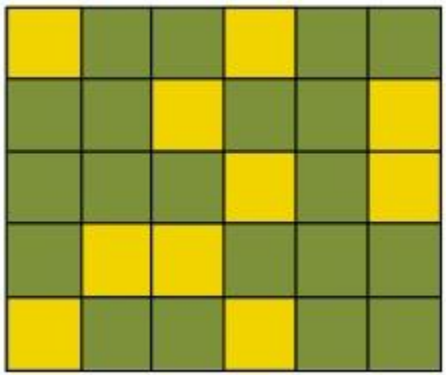
D. 16 square units

Measurement and Data
3.MD.C.06
Items 242 – 248

ITEM 242

Use the pictures to answer the question.





Melia puts together a puzzle. Then she covers the puzzle with green and yellow tiles. The tiles form the rectangle shown above. Each tile is 1 square inch.

What is the area of the puzzle?

A. 20 inches

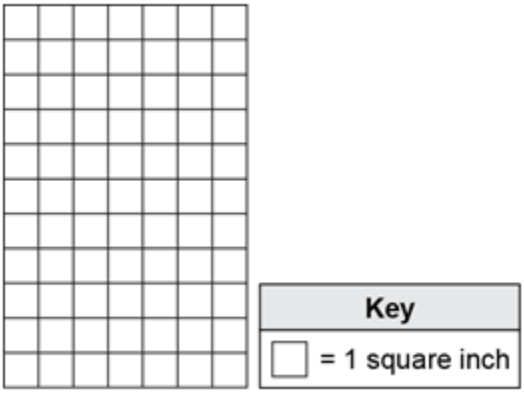
B. 22 inches

C. 30 square inches

D. 32 square inches

ITEM 243

Evan is creating an art project and has divided his poster into square inches.



What is the area of Evan's poster?

A. 36 square inches

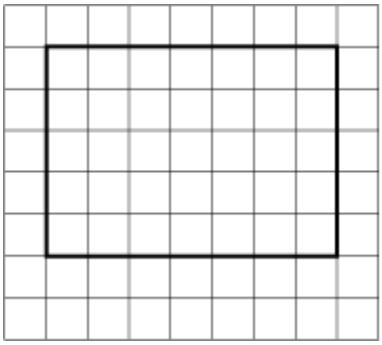
B. 66 square inches

C. 70 square inches

D. 77 square inches

ITEM 244

Heidi drew the rectangle shown on this grid.



What is the area of the rectangle?

A. 24 square units

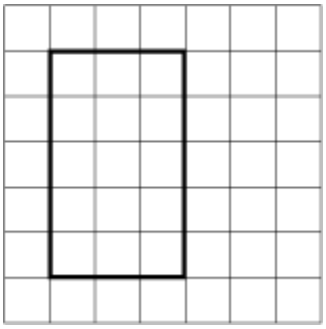
B. 30 square units

C. 35 square units

D. 40 square units

ITEM 245

Sam drew this rectangle on a grid.



What is the area of the rectangle?

A. 12 square units

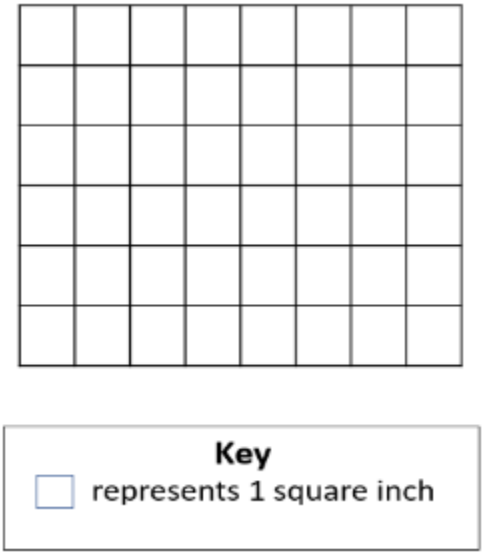
B. 15 square units

C. 16 square units

D. 18 square units

ITEM 246

Jonathan has a sheet of graphing paper divided into square inches.



What is the area of Johnathan's paper?

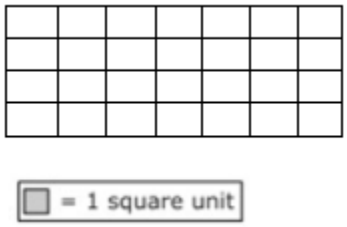
A. 48 square inches

B. 42 square inches

C. 24 square inches

D. 28 square inches

ITEM 247



What is the area of the rectangle?

A. 18 square units

B. 22 square units

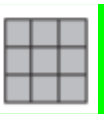
C. 24 square units

D. 28 square units

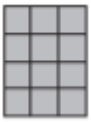
ITEM 248

Which figure has an area of 9 square inches?

= one square inch

A. 

B. 

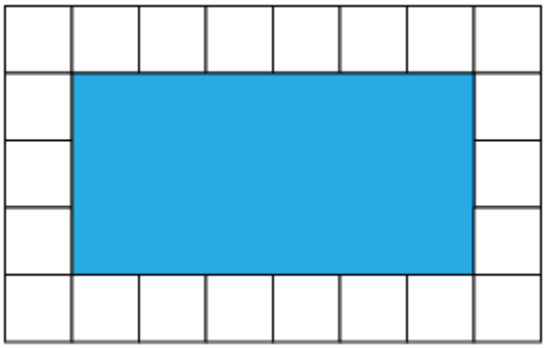
C. 

D. 

Measurement and Data
3.MD.C.07a
Items 249 – 251

ITEM 249

What is the area of the shaded figure?



A. 18 square units

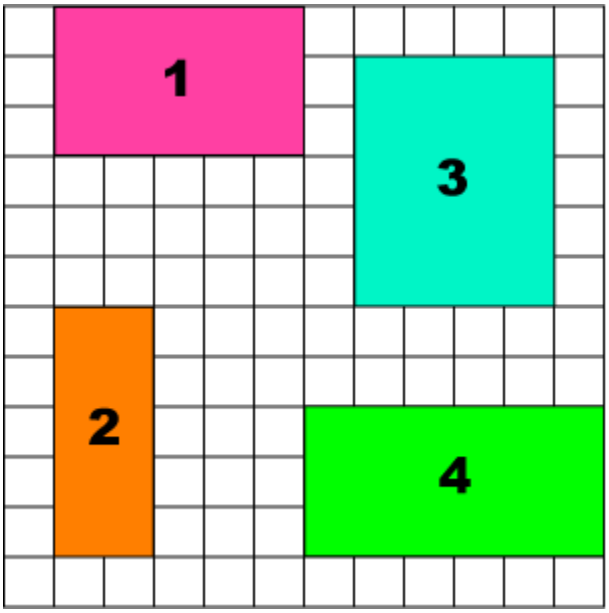
B. 22 square units

C. 24 square units

D. 26 square units

ITEM 250

Mike drew rectangles on a grid.



Which rectangle has an area of 15 square units?

A. rectangle 1

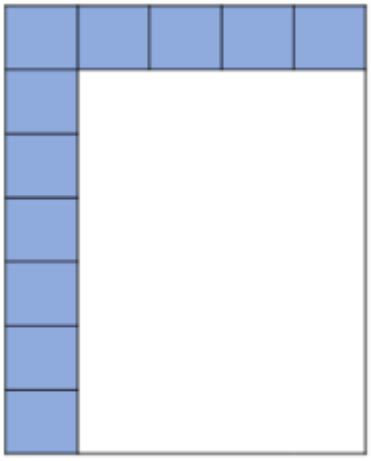
B. rectangle 2

C. rectangle 3

D. rectangle 4

ITEM 251

Carlos wants to find the area of a rectangle by using square tiles. His progress is shown in the image below.



How many square tiles will Carlos need to tile the entire area of the rectangle?

A. 11

B. 24

C. 28

D. 35

Measurement and Data
3.MD.C.07b
Items 252 – 257

ITEM 252

Mr. Brown's rectangular garage is 12 feet long and 8 feet wide. What is the area of Mr. Brown's garage?

A. 20 square feet

B. 40 square feet

C. 74 square feet

D. 96 square feet

ITEM 253

Mr. Rudnick's class wants to plant a rectangular garden with an area of 36 square feet. Which of the following does **not** show a possible size of the garden?

A. 4 feet x 9 feet

B. 5 feet x 7 feet

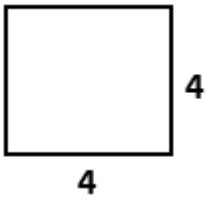
C. 3 feet x 12 feet

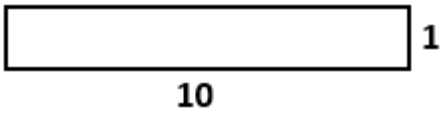
D. 6 feet x 6 feet

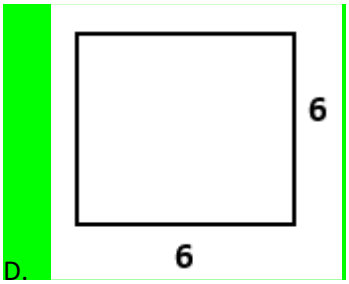
ITEM 254

Which of these rectangles has the largest area?

A. 

B. 

C. 

D. 

ITEM 255

Derek built an outdoor cage for his puppy. The cage is in the shape of a rectangle and has a length of 6 feet and the width is 4 feet. What is the area, in square feet, of the cage?

A. 9

B. 10

C. 18

D. 24

ITEM 256

Tamara's rectangular bedroom is 7 feet long and 9 feet wide. How many square feet of carpeting would Tamara need to purchase to cover her entire bedroom floor?

A. 16

B. 32

C. 54

D. 63

ITEM 257

Part A
Jamilla and Breonna are having a party at Jamilla's house. They need to know if there is enough room in her backyard for the games they are planning. Jamilla and Breonna think they will need at least 45 square yards for all they have planned. Jamilla's backyard is 6 yards long and 8 yards wide. Do they have enough room in Jamilla's backyard for the party? Show your work.

Part B
Breonna's backyard is 8 yards long and 9 yards wide. What is the difference in area between Jamilla's backyard and Breonna's backyard? Show your work.

Enter your answers below.

A. Yes

$6 \times 8 = 48 > 45$

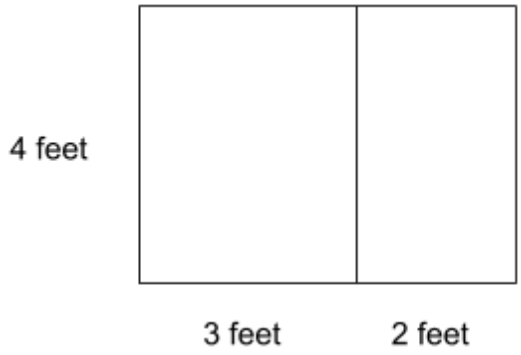
B. 24 square yards

$8 \times 9 - 6 \times 8 = 24$

Measurement and Data
3.MD.C.07c
Items 258 – 266

ITEM 258

Demetrius and Joshua made a poster that was 4 feet long and 3 feet wide. Jacqueline and Brenda made a poster that was 4 feet long and 2 feet wide. They placed their posters on the wall so that there was no space between them. How much area did the two posters cover?



A. 9 square feet

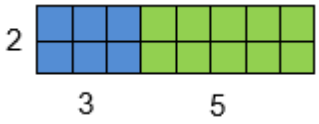
B. 18 square feet

C. 20 square feet

D. 12 square feet

ITEM 259

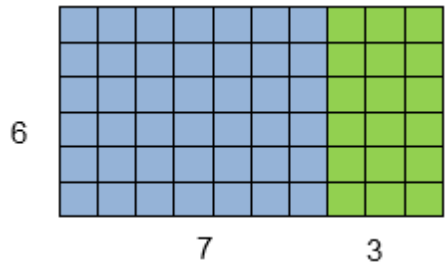
Jonathan bought one window sticker that was 2 inches long and 3 inches wide. He bought another window sticker that was 2 inches long and 5 inches wide. If he put both stickers on the window with no space between them, how many square inches would the stickers cover?



__16___

ITEM 260

Sharnesia has enough blue square stickers to make a 6 x 7 rectangle. Ladarius has enough green square stickers to make 6 x 3 rectangle. What are **three** correct ways to find the area of the larger rectangle if they place their two rectangles side by side as shown?



A. 6 x 7 + 6 x 3

B. 6 + 6 + 10 + 10

C. 6 x 10

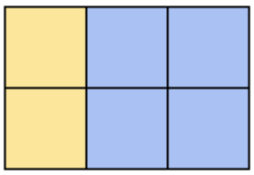
D. 6 x 7 x 3

E. 6 x 3 + 6 x 7

__A___ __C___ __E___

ITEM 261

Select the two expressions that give the area of the diagram.



A. 2 + 3

B. 2 x 3

C. (2 x 1) + 3

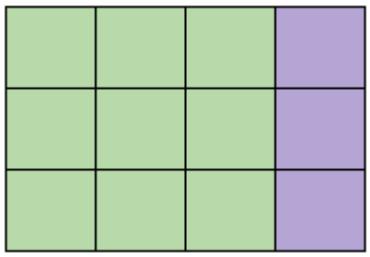
D. (2 x 1) + (2 x 2)

E. (2 x 2) + (2 x 3)

___B__ __D___

ITEM 262

Select the three expressions that give the area of the diagram.



A. 3 x 4

B. 3 x (3 + 1)

C. 3 ÷ 4

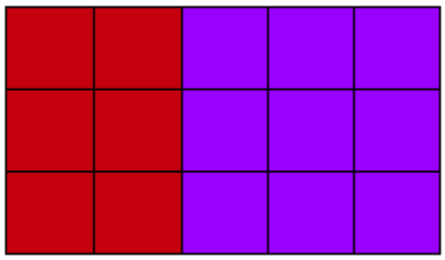
D. (3 x 2) + (1 x 3)

E. (3 x 3) + (3 x 1)

___A___ ___B__ __E___

ITEM 263

Select the expression that can be used to find the area of the diagram.



A. 3 + 5

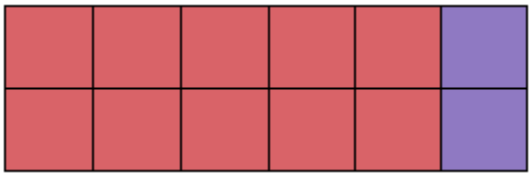
B. 3 x 2 + 3

C. (2 + 3) x 2

D. 3 x (2 + 3)

ITEM 264

Select the expression that can be used to find the area of the diagram.



A. (5 x 2) + 1

B. (5 x 2) + (1 x 2)

C. 5 x (5 + 2)

D. (5 x 5) + (2 x 2)

ITEM 265

Mrs. Gladney has two tables in her classroom to use for a science experiment. Both tables are 3 feet wide and 5 feet long. If she places them side by side with no space between them, how much area would the two tables cover?

A. 15 square feet

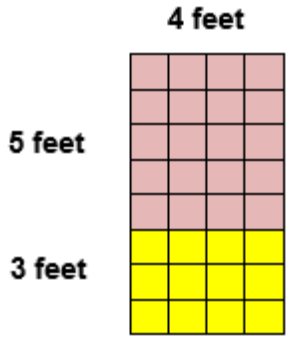
B. 30 square feet

C. 22 square feet

D. 16 square feet

ITEM 266

Jordan has a piece of pink fabric that is 4 feet long and 5 feet wide. Areli has a piece of yellow fabric that is 4 feet long and 3 feet wide. If they lay their pieces together with no space between them as shown, what are **three** ways they can find how much area their two pieces of fabric cover?



A. $4 \times 5 + 4 \times 3$

B. $4 + 4 + 8 + 8$

C. 4×8

D. $4 \times 5 \times 3$

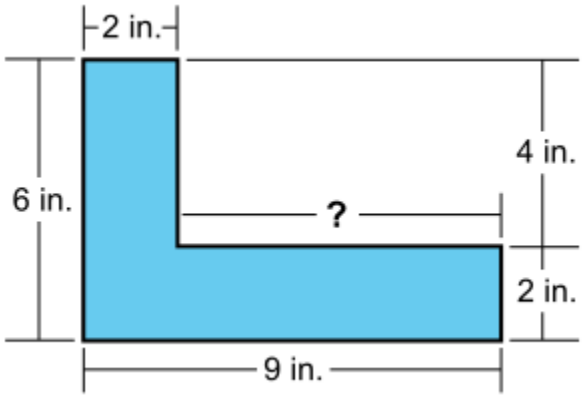
E. $3 \times 4 + 5 \times 4$

__A___ __C___ __E___

Measurement and Data
3.MD.D.08
Items 267 – 280

ITEM 267

Jonathan created an art project with a perimeter of 30 inches.



What is the length of the project's missing side?

A. 5 inches

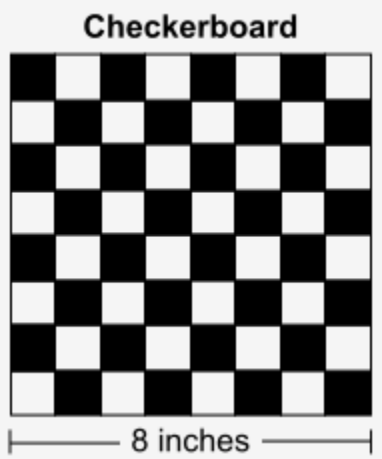
B. 7 inches

C. 12 inches

D. 19 inches

ITEM 268

A drawing of a square checkerboard is shown.



The length of each side of the checkerboard is 8 inches. All of the black and white squares are the same size.

What is the perimeter, in inches, of **one** of the black squares on the checkerboard?

A. 1 inch

B. 4 inches

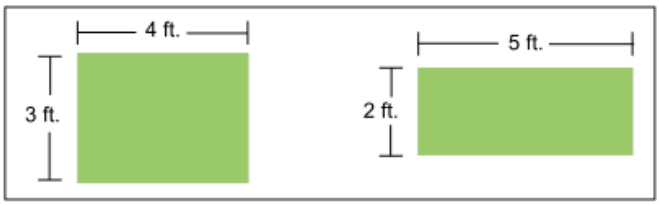
C. 32 inches

D. 64 inches

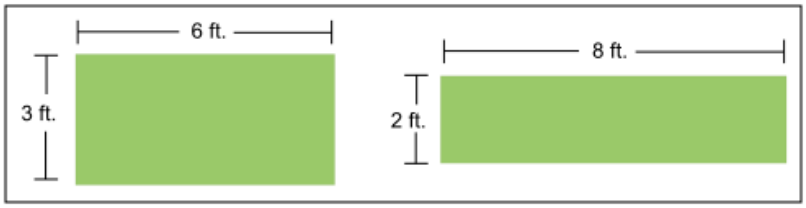
ITEM 269

Abby planted two gardens with the same areas but different perimeters. Which set of diagrams could show the gardens that Abby planted?

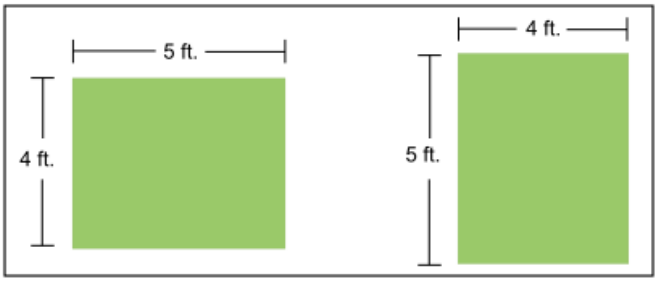
A.



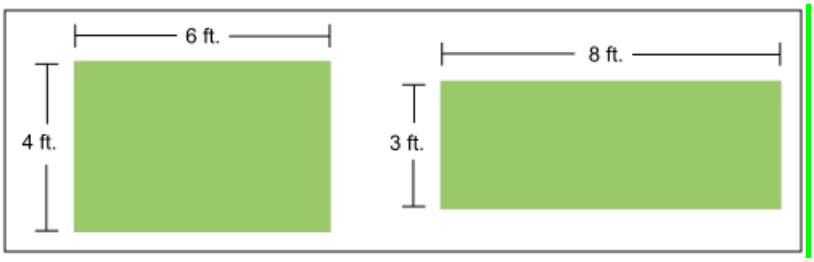
B.



C.

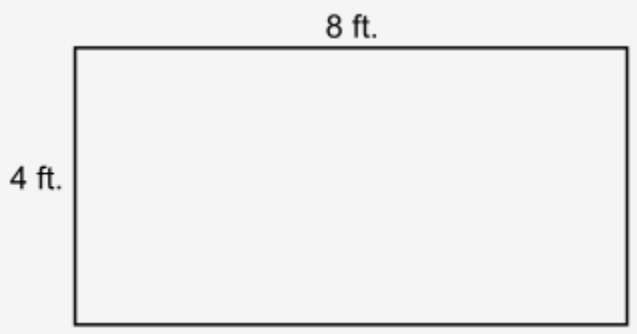


D.



ITEM 270

This picture shows the measurements of a rectangular cage for a turtle.



What is the perimeter of the cage?

A. 12 feet

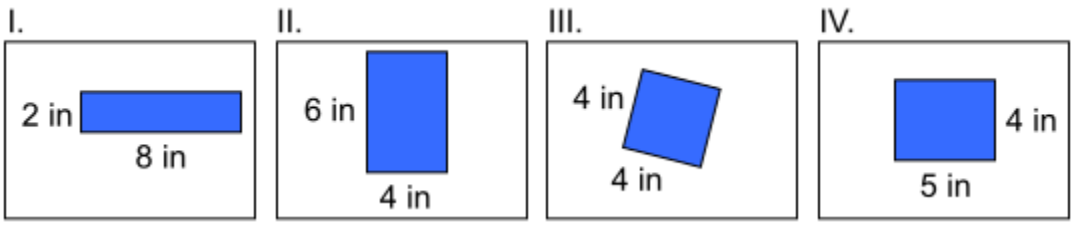
B. 20 feet

C. 24 feet

D. 32 feet

ITEM 271

Which two rectangles have the same perimeter?



A. I and IV

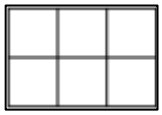
B. I and III

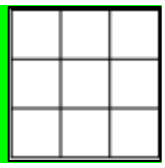
C. II and IV

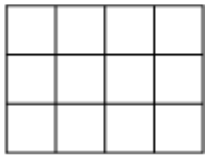
D. I and II

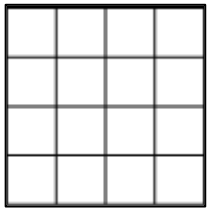
ITEM 272

Justin used square tiles to make shapes. The sides of the tiles are 1 inch. Which shape shows a square with a perimeter of 12 inches?

A. 

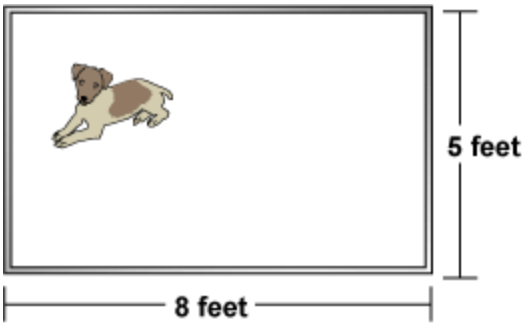
B. 

C. 

D. 

ITEM 273

Maria builds a fence for her dog.



What is the perimeter of the rectangular fence?

A. 13 feet

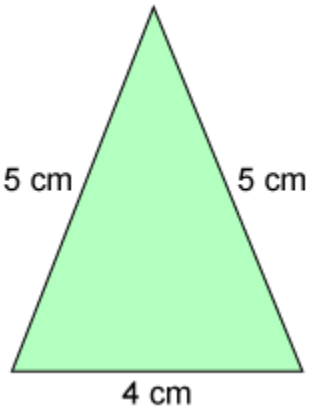
B. 18 feet

C. 26 feet

D. 40 feet

ITEM 274

Gary glues a piece of string around the edge of this triangle.



What is the length of the string?

A. 9 cm

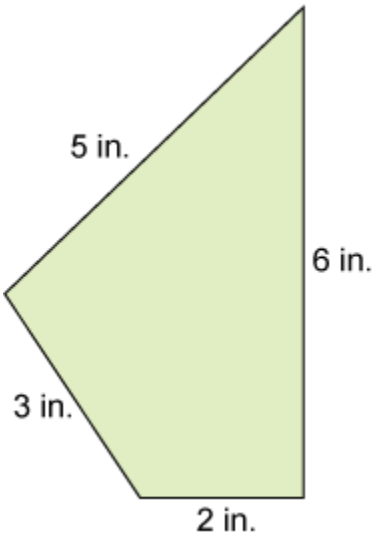
B. 14 cm

C. 16 cm

D. 20 cm

ITEM 275

What is the perimeter of this shape?



A. 14 inches

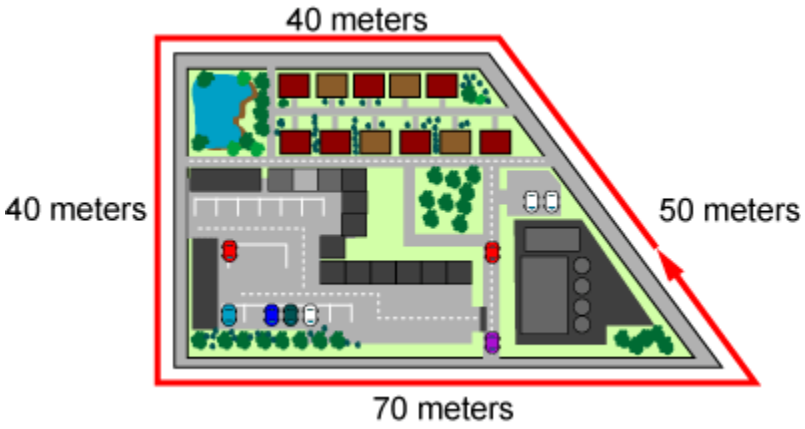
B. 15 inches

C. 16 inches

D. 17 inches

ITEM 276

A bus traveled all the way around this school.



How far did the bus travel?

A. 160 meters

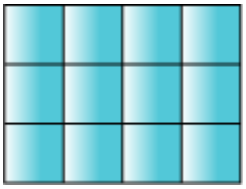
B. 180 meters

C. 200 meters

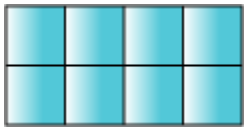
D. 220 meters

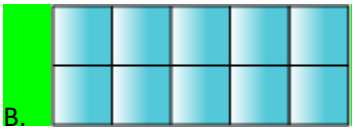
ITEM 277

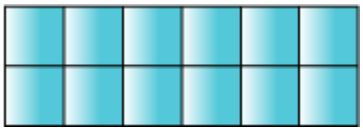
Nita made this shape from square tiles.

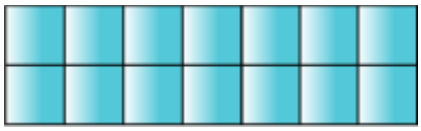


Which shape has the **same perimeter**?

A. 

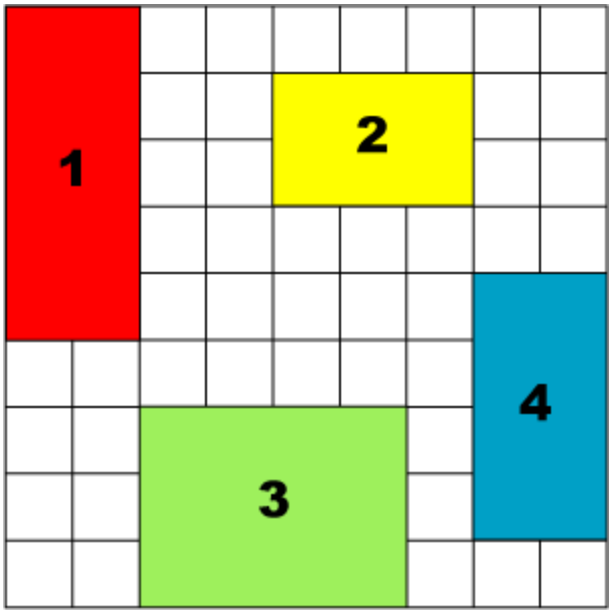
B. 

C. 

D. 

ITEM 278

Mona drew 4 rectangles on a piece of graph paper.



Which rectangle has a perimeter of 12 units?

A. rectangle 1

B. rectangle 2

C. rectangle 3

D. rectangle 4

ITEM 279

Victor wants to build a fence around his dogs' play area in his backyard. The play area is 8 feet wide and 12 feet long. What is the total length of fence, in feet, Victor needs to build the fence around the play area?

Enter your answer below.

_40____

ITEM 280

Amarion runs 4 miles a day. His goal is to run 32 miles. After 5 days, how many miles, m, does Amarion have left to meet his goal?

Select the equation that could be used to find m.

A. $32 \times m + 4 = 5$

B. $4 \times 5 + m = 32$

C. $4 \times 5 - m = 32$

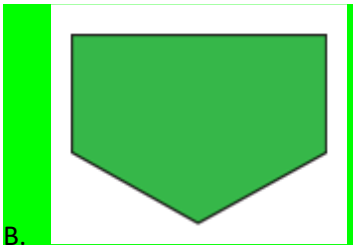
D. $32 - 4 + m = 5$

Geometry
3.G.A.01
Items 281 – 282

ITEM 281

Which of the figures is **not** a quadrilateral?

A. 

B. 

C. 

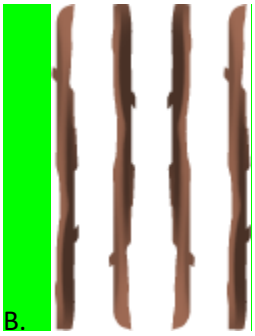
D. 

ITEM 282

Carly is going to connect the ends of four sticks to construct a geometric shape.

Which stick lengths could be used to construct a rhombus?

A. 

B. 

C. 

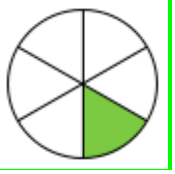
D. 

Geometry
3.G.A.02
Items 283 – 288

ITEM 283

Which circle's shaded area shows $\frac{1}{6}$ of the circle's whole area?

A. 

B. 

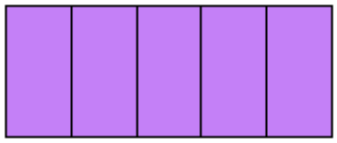
C. 

D. 

ITEM 284

Harley draws a shape. She divides it into equal parts. Each part is $\frac{1}{6}$ of the shape. Which shape could be the one Harley drew?

A. 

B. 

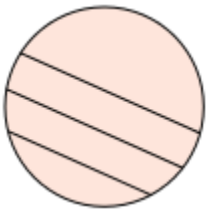
C. 

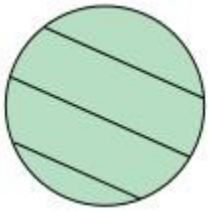
D. 

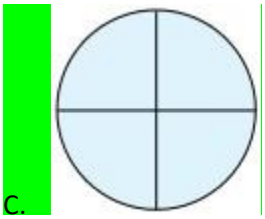
ITEM 285

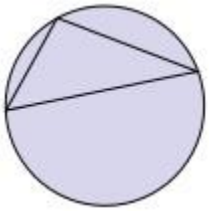
Jaylyn wants to share a pizza between herself and 3 of her friends.

In order for each of them to have an equal piece of the pizza, which pizza should Jaylyn buy?

A. 

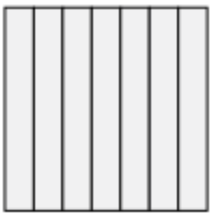
B. 

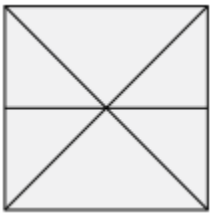
C. 

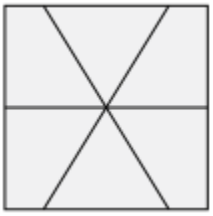
D. 

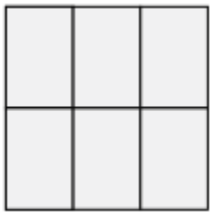
ITEM 286

Which picture shows a square in which each section represents $\frac{1}{6}$?

A. 

B. 

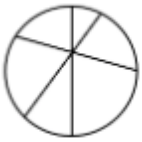
C. 

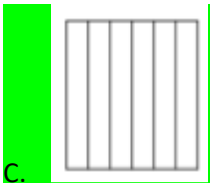
D. 

ITEM 287

Landon draws a shape. He divides his shape into parts. Each part is 1/6 the area of the shape. Which shape could be the one that Landon draws?

A. 

B. 

C. 

D. 

ITEM 288

Which shape has parts that are $\frac{1}{8}$ of the area of the whole shape?

A. 

B. 

C. 

D.