Which expressions are equivalent to $-2.5(1-2n)-1.5n$?

Select **all** that apply.

☐ A. $-2.5-3.5n$

☐ B. $-2.5+3.5n$

☐ C. $-2.5-6.5n$

☐ D. $-2.5-n(5-1.5)$

☐ E. $-2.5+n(5-1.5)$

1

Jessica rented 1 video game and 3 movies for a total of $11.50.

- The video game cost $4.75 to rent.
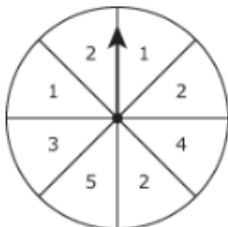- The movies cost the same amount each to rent.

What amount did Jessica pay to rent each movie?

Enter your answer in the box.

$ [_____]

2

The spinner shown is divided into 8 equal sections.

The arrow on this spinner is spun once.

What is the probability that the arrow will land on a section labeled with a number **greater** than 3?

Enter your answer in the space provided. Enter **only** your fraction.

▶ Numbers
▶ Arithmetic and Units
▶ Exponents and Roots
▶ Relations
▶ Geometry
▶ Groups

3

Two equations are shown.

Equation 1: $\frac{2}{3}\left(x - 6\right) = 6$

Equation 2: $\frac{2}{3}y - 6 = 6$

Solve each equation. Then, enter a number in each box to make this statement true.

The value of x is [   ] , and the value of y is

[   ] .

4

A train traveled $\frac{1}{5}$ of the distance between two cities in $\frac{3}{4}$ of an hour.

At this rate, what fraction of the distance between the two cities can the train travel in one hour?

Enter your answer in the space provided. Enter **only** your fraction.

| ⟳ | ↺ | ⟳ | ⌫ | + | − | × | ÷ | 吕 | 吕 | y^x | √ | = | ≈ |

▸ Numbers

▸ Arithmetic and Units

▸ Exponents and Roots

▸ Relations

▸ Geometry

▸ Groups

5

Misha has a cube and a right-square pyramid that are made of clay. She placed both clay figures on a flat surface.

Select each box in the table that identifies the two-dimensional-plane sections that **could** result from a vertical or horizontal slice through each clay figure.

Clay Figure	Cube	Right-Square Pyramid
Triangle	☐	☐
Square	☐	☐
Rectangle That Is Not a Square	☐	☐

6

A store owner paid $15 for a book. She marked up the price of the book by 40% to determine its selling price.

Part A

What is the selling price of the book?

Enter your answer in the box.

$ [_____]

Part B

A customer buys a different book that has an original selling price of $38. The book is discounted 25%. The customer must pay a 6% sales tax on the discounted price of the book.

What is the total amount the customer pays for the discounted book?
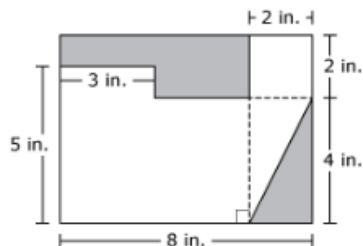
Enter your answer in the box.

$ [_____]

7

Which expressions are a factor of $-48xyz - 24xy + 40xyz$?

Select **all** that apply.

☐ A. 4

☐ B. 24

☐ C. $3x$

☐ D. $8y$

☐ E. $2xy$

☐ F. $6xy$

☐ G. xyz

8

This figure shows two shaded regions and a non-shaded region. Angles in the figure that appear to be right angles are right angles.

Part A

What is the area, in square inches, of the triangular-shaped region that is shaded in this figure?

Enter your answer in the box.

|_____| square inches

Part B

What is the area, in square inches, of the non-shaded region in this figure?

Enter your answer in the box.

|_____| square inches

9

The students in Naomi's class sold calendars for a fund-raiser this year and last year.

This year, the selling price of each calendar was $13.25.

The price this year represents 6% more than the selling price of each calendar last year.

10

Part A

What was the selling price of each calendar last year ?

Enter your answer in the box.

$ |_____|

Part B

The students in Naomi's class earned 20% of the selling price of each calendar sold this year and last year.

- At last year's selling price, Naomi's class sold 650 calendars.
- At this year's selling price, Naomi's class sold 600 calendars.

Select a choice from each drop-down menu to make this statement true.

The students in Naomi's class earned more money from the fund-raiser

| Last year or this year | by | $20. $25. $35. 450. or $60 |