

Grade 7 – Math

This task requires students to use proportional relationships to solve multi-step ratio problems.

QUESTION:

On Friday, three friends shared how much they read during the week.

- Barbara read the first 100 pages from a 320-page book in the last 4 days.
- Colleen read the first 54 pages from a 260-page book in the last 3 days.
- Nancy read the first 160 pages from a 480-page book in the last 5 days.

Part A: A person's average reading rate can be defined as the number of pages read divided by the number of days. Place the three friends' reading rates in order from greatest to least by clicking on the names and dragging them to the appropriate boxes.

Greatest Rate (pages per day)	<input type="text"/>
	<input type="text"/>
Least Rate (pages per day)	<input type="text"/>

Barbara

Colleen

Nancy

Part B: If the three friends continue to read every day at their rates, who will finish reading her book first? Second? Third?

Order the friends from the first one who is predicted to finish her book to the third one who is predicted to finish her book. Click on the names and drag them to the appropriate boxes.

First	<input type="text"/>
Second	<input type="text"/>
Third	<input type="text"/>

Barbara

Colleen

Nancy

ANSWER:

Part A:

Nancy ($160 \div 5 = 32$ pages per day)

Barbara ($100 \div 4 = 25$ pages per day)

Colleen ($54 \div 3 = 18$ pages per day)

Part B:

Barbara – $(320 - 100) \div 25 = 8.8$ days

Nancy – $(460 - 160) \div 32 = 10.0$ days

Colleen – $(260 - 54) \div 18 = 11.4$ days