7.3A: Add, subtract, multiply, and divide rational numbers fluently (Supporting Standard)

(7.1A; 7.1B)

- 1. A coach purchased a soccer ball for each of his 18 players. If each soccer ball cost \$12.99, how much did the coach spend before sales tax was added?
 - **A** \$116.91
 - **B** \$216.12
 - **C** \$222.82
 - **D** \$233.82

(7.1A; 7.1B)

- 2. Scott bought 6 shirts that each cost the same amount. Before sales tax was added, his total bill was \$80.94. How much did each shirt cost?
 - **A** \$13.36
 - **B** \$13.49
 - **C** \$13.54
 - **D** \$13.64

(7.1A; 7.1B)

- 3. Jonathan sold 12 bags of candy for a school fundraiser, or a total of 22.56 pounds of candy. If each bag held the same amount of candy, how many pounds of candy were in each bag?
 - $\mathbf{A} = 0.98$
 - **B** 1.88
 - C 1.98
 - **D** 2.88

(7.1A; 7.1B)

- 4. Lane bought 12 pencils for \$0.39 each. What was the total cost of the pencils before sales tax was added, in dollars and cents?
 - Record your answer in the space provided.



(7.1A; 7.1B)

- Same distance every day for 7 days. If he rode his bike a total of $61 \frac{1}{4}$ miles, how many miles did Drew ride each day?
 - **A** $8\frac{1}{4}$
 - **B** $8\frac{1}{2}$
 - **C** $8\frac{3}{4}$
 - **D** $9\frac{1}{4}$

7.4A: Represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including d = rt (Readiness Standard)

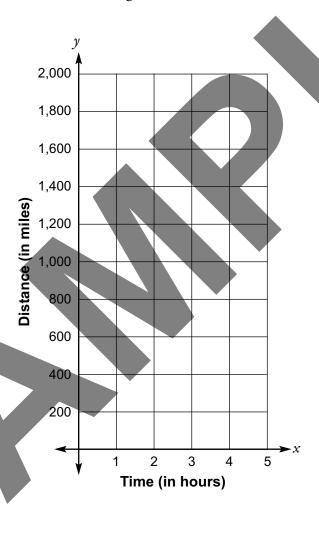
(7.1A; 7.1B; 7.1D; 7.1E)

1. An airplane flies at a constant rate and travels 1,710 miles in 3 hours.

The distance the airplane can travel in different numbers of hours can be determined by an equation.

Plot four points that satisfy the equation.

Plot each point on the coordinate grid.



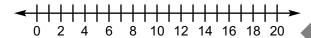
7.10B: Represent solutions for one-variable, two-step equations and inequalities on number lines (Supporting Standard)

(7.1A; 7.1D; 7.1E; 7.1F)

1. Mona wants to run more than 60 miles this week. She ran a total of 24 miles during the first 4 days of the week.

Use the number line to represent the number of miles Mona must run each day if she wants to meet her goal.

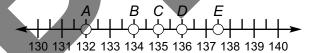
Draw an open or closed circle and a ray to indicate the direction.



(7.1A; 7.1D; 7.1E; 7.1F)

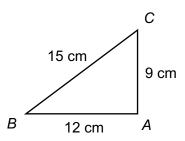
2. Tomás paid \$26 for a pair of boots that were on sale. He calculated that the sale price for the boots was \$8 less than \(\frac{1}{4}\) of the original price. Which point on the number line represents the original price of the boots?

Shade the **ONE** correct circle that represents the point.



7.5C: Solve mathematical and real-world problems involving similar shape and scale drawings (Readiness Standard)

Use the diagram below to answer questions 1 and 2.



(7.1A; 7.1D; 7.1F)

1. A math teacher asked students to draw Triangle *RST* so that it was similar to Triangle *ABC*.

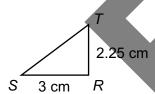
Which of the following could be the side measurements of Triangle *RST*?

Select TWO correct answers.

- □ 3 cm, 6 cm, 8 cm
- □ 8 cm, 8 cm, 9 cm
- ☐ 6 cm, 8 cm, 10 cm
- □ 7 cm, 10 cm, 12 cm
- □ 12 cm, 16 cm, 20 cm

(7.1A; 7.1D; 7.1F)

2. Kelly drew Triangle *RST* shown below.



If Kelly's triangle is similar to Triangle ABC, what is the length of \overline{ST} in Kelly's triangle?

A 3.5 cm

C 5.0 cm

B 3.75 cm

D 7.5 cm

(7.1A; 7.1D; 7.1F)

3. Hester is trying to find the width of a famous painting. There is a picture of the painting in one of her books.



17.5 in.

3 in.

3.5 in.

If the picture is similar to the painting, how wide is the painting?

A 17 in.

C 10.5 in.

B 15 in.

D 9.5 in.

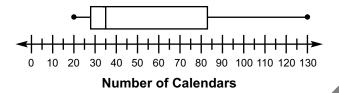
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7.12A: Compare two groups of numeric data using comparative dot plots or box plots by comparing their shapes, centers, and spreads (Readiness Standard)

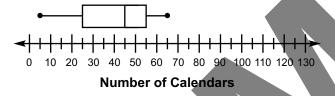
(7.1A; 7.1D; 7.1G)

1. Each member of a middle-school's tennis team and track team sold calendars for a fundraiser. Each coach summarized her team's sales on a box plot, as shown below.

Tennis Team's Calendar Sales



Track Team's Calendar Sales



Circle the correct option for each blank that completes the sentence below.

The distribution of data for the (a) team has a greater

spread than that of the _____(b) team.

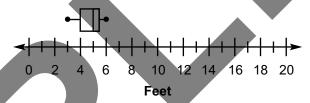
(a) tennis or (a) track

(b) tennis or (b) track

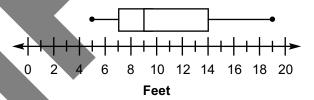
(7.1A; 7.1D; 7.1G)

2. In science class, several students designed an experiment to compare the distance a toy car would travel on carpet and on tile. They summarized their data on the box plots below.

Distance Traveled on Carpet



Distance Traveled on Tile



Based on the box plots, which statement correctly compares the interquartile ranges (IQRs) of the two data sets?

- **A** The difference between the two IQRs is 4.
- **B** The difference between the two IQRs is 5.5.
- C The difference between the two IQRs is 12.
- **D** The IQRs for the two data sets are the same.