



PRACTICE



TUTORIAL

Name: _____

2-7 Additional Practice

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1. Leveled Practice The graph shows the number of possible passengers for a given number of roller coaster cars that leave the platform.

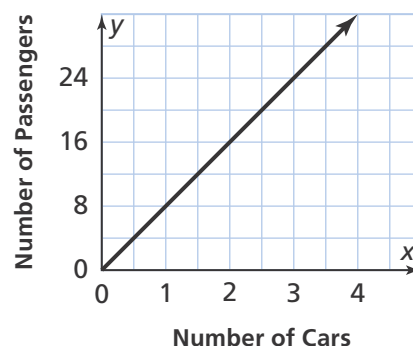
- a. Use two sets of coordinates to write an equation to describe the relationship.

$$m = \frac{24 - \boxed{}}{\boxed{} - 2} = \frac{\boxed{}}{\boxed{}}$$

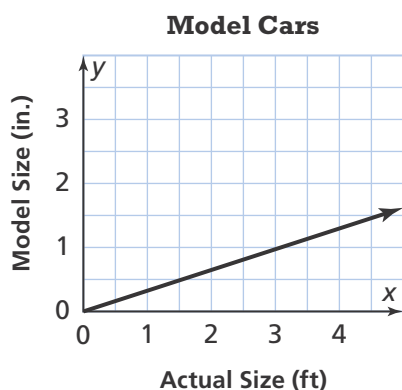
$$y = \boxed{}x$$

- b. Interpret the equation in words.

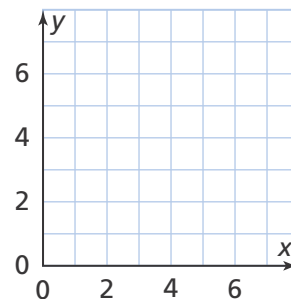
Each roller coaster car holds passengers.

Roller Coaster Passengers

2. Model with Math The graph relates the actual size of a car in feet to a model of the car in inches. Write an equation that describes the relationship. © MP.4

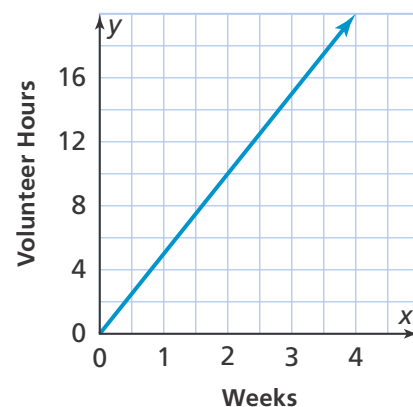


- 3.** Graph the equation $y = \frac{2}{3}x$ on the coordinate plane.

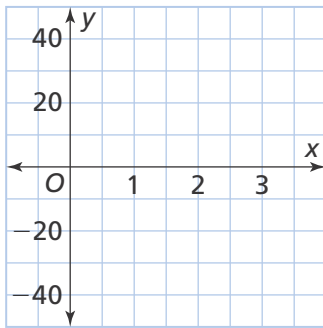


4. A park volunteer plans to work on the park's stone walls for 1 hour every Monday, 1 hour every Wednesday, and 3 hours on Fridays. The graph shows the number of hours he plans to work for a given number of weeks.

- a. Find the constant of proportionality of the line. Then find the slope of the line.
- b. Write an equation to describe the relationship.
- c. How many hours will the volunteer work in 16 weeks?



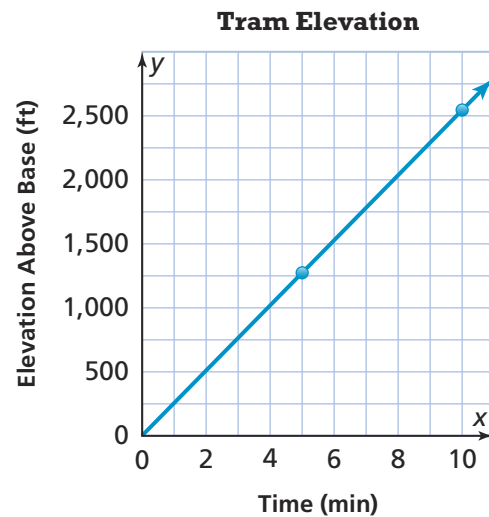
5. **Model with Math** Graph the equation $y = -10x$ on the coordinate plane. © MP.4



6. Write an equation in the form $y = mx$ for the proportional relationship that passes through the points $(2, -15)$ and $(6, -45)$.

7. **Higher Order Thinking** The longest aerial tramway in the United States is at Sandia Peak in New Mexico. The graph shows the relationship between the time of the tram ride and its elevation above the base.

- Use the points $(5, 1,273)$ and $(10, 2,546)$ to write an equation for the line.
- Interpret the equation in words.
- Explain why the line is valid only for the first quadrant.



© Assessment Practice

8. The graph shows a proportional relationship between the temperature in degrees Celsius and the time in minutes during a science experiment.

PART A

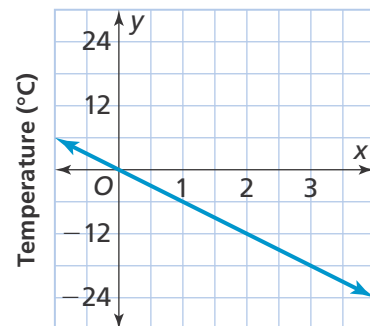
Write an equation to describe the relationship.

PART B

Interpret the equation in words.

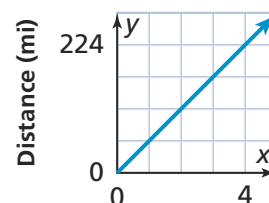
9. Bus X travels 224 miles in 4 hours. Write the equation of the line that describes the relationship between distance y and time x .

Temperature Change



Time (min)

Bus X



Time (hr)

