

Identify the Constant of Proportionality From a Graph

In a proportional relationship, the **constant of proportionality** is the ratio of y to x .

To find the constant of proportionality from a graph, choose a point on the graph and find the ratio of the y -coordinate to the x -coordinate.

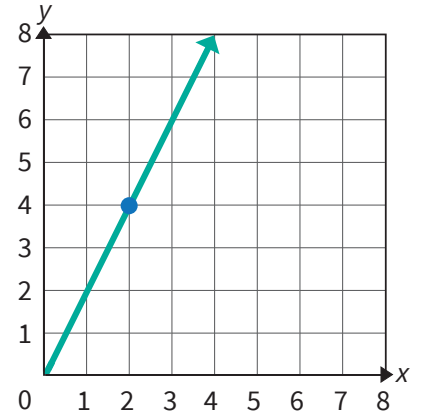
—————→ **Let's try it!** ←————

First, identify the coordinates of any point on the line other than the origin. Then, calculate the ratio of the y -coordinate to the x -coordinate. Simplify the ratio.

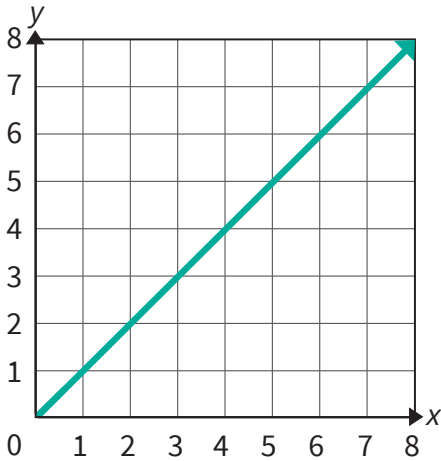
(2, 4)

$$\frac{\text{y-coordinate}}{\text{x-coordinate}} = \frac{4}{2} = 2$$

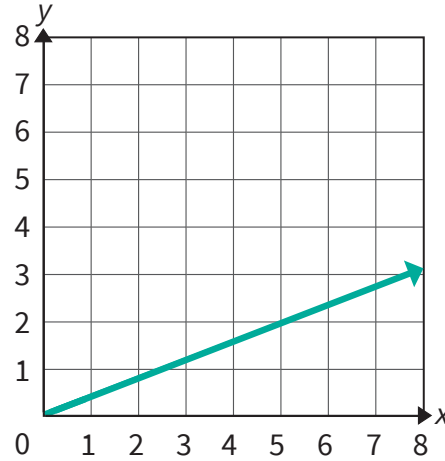
So, the constant of proportionality is 2.



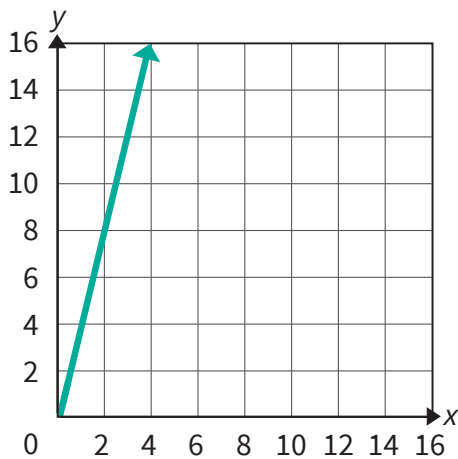
Each graph shows a proportional relationship. Determine the constant of proportionality from each graph. Write your answer as a whole number or a simplified fraction.



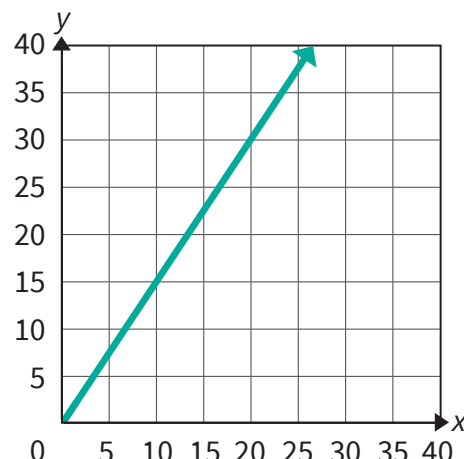
1



$\frac{2}{5}$



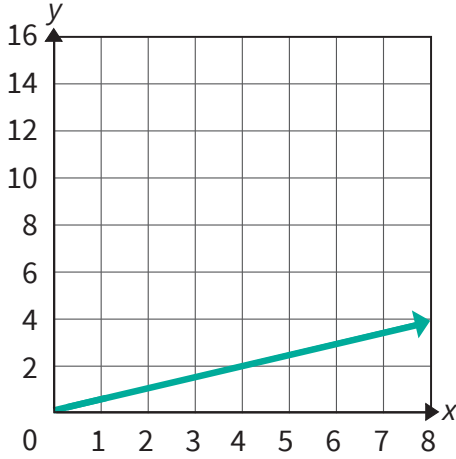
4



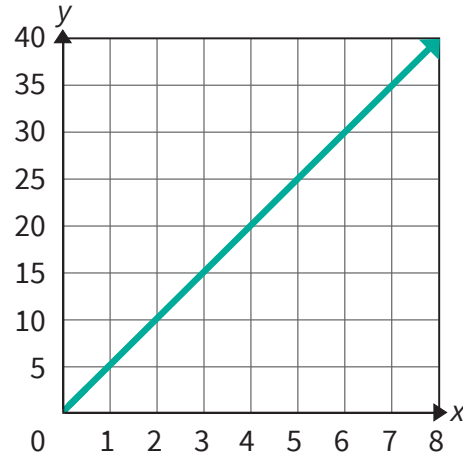
$\frac{3}{2}$

Identify the Constant of Proportionality From a Graph

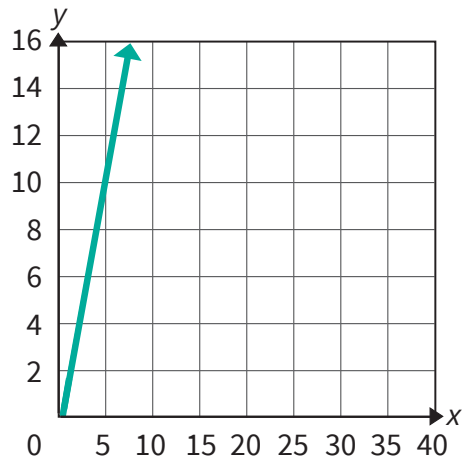
Keep going! Each graph shows a proportional relationship. Determine each constant of proportionality. Write your answer as a whole number or a simplified fraction.



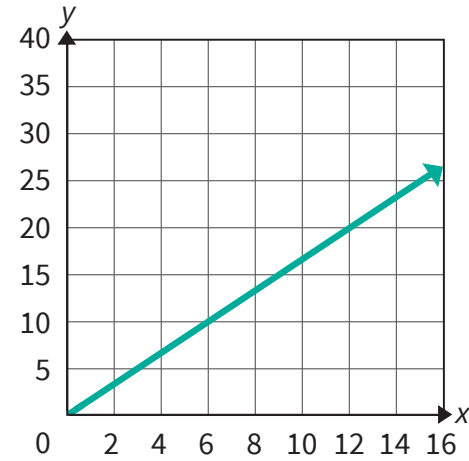
$$\frac{1}{2}$$



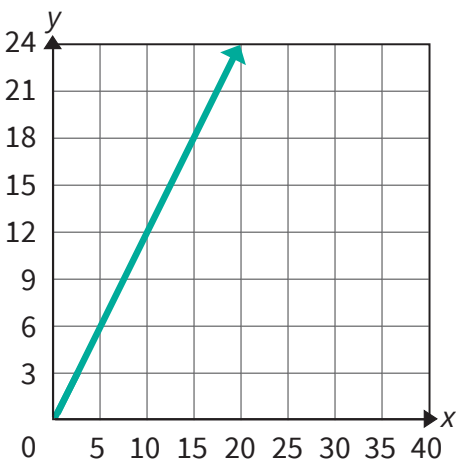
$$5$$



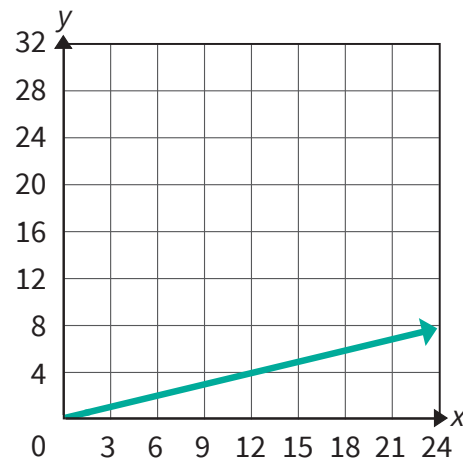
$$2$$



$$\frac{5}{3}$$



$$\frac{6}{5}$$



$$\frac{1}{3}$$