RATE OF CHANGE: GRAPHS

The graph of a linear function is a straight line with a constant rate of change. You can find the rate of change of a linear function, or the slope, using this formula:

$$\text{Rate of change} = \frac{\text{change in } y}{\text{change in } x} = \frac{\text{rise}}{\text{run}}$$
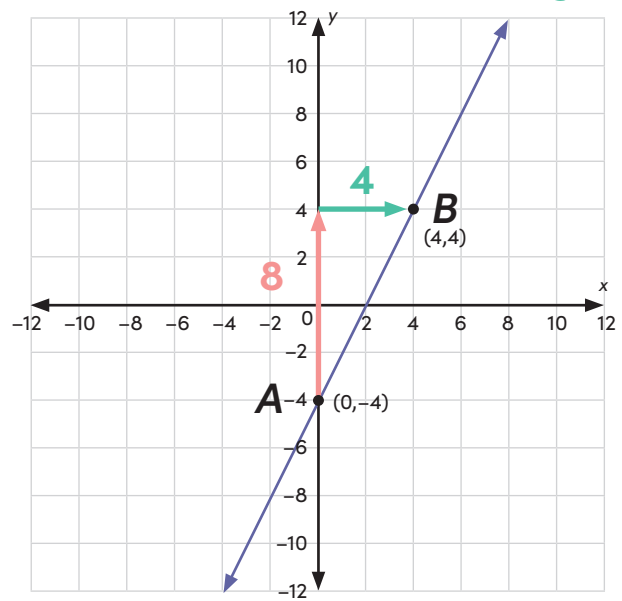
To find the rate of change on this graph, pick two points on the line that are easy to identify.
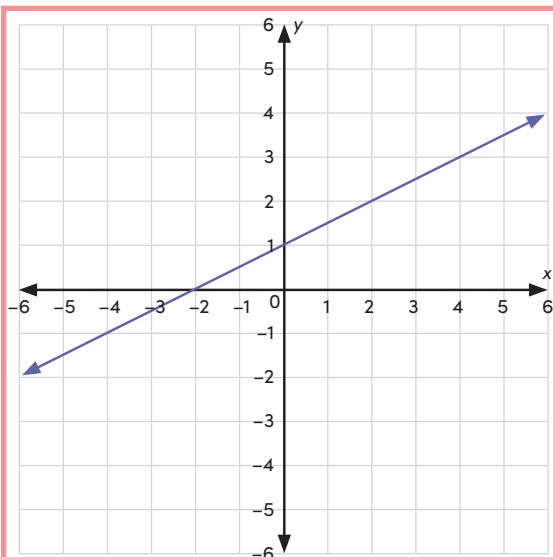
A is at (0, −4). *B* is at (4, 4).

To move from point *A* to point *B*, first find the rise. Since the *y*-axis has a scale of 2, move up four increments of 2 to get a rise of 8. Since the *x*-axis has a scale of 2, move right two increments of 2 to get a run of 4.

Write the rate of change. Make sure to simplify your answer.

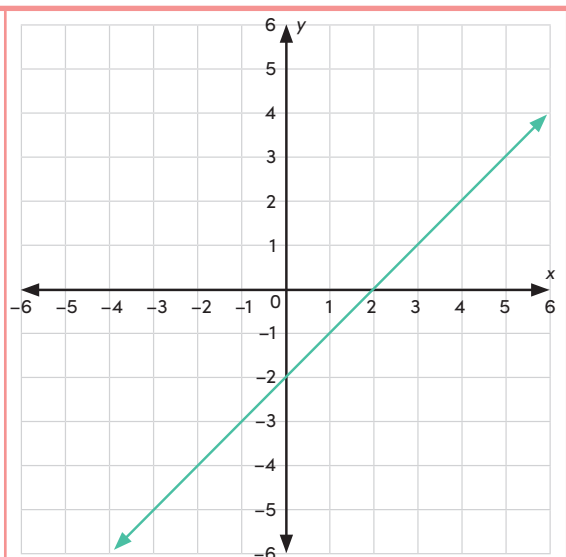$$\text{Rate of change} = \frac{\text{rise}}{\text{run}} = \frac{8}{4} = \textbf{2}$$

Try it yourself! Find the rate of change of each linear function below. Then circle the greater rate of change in each row.
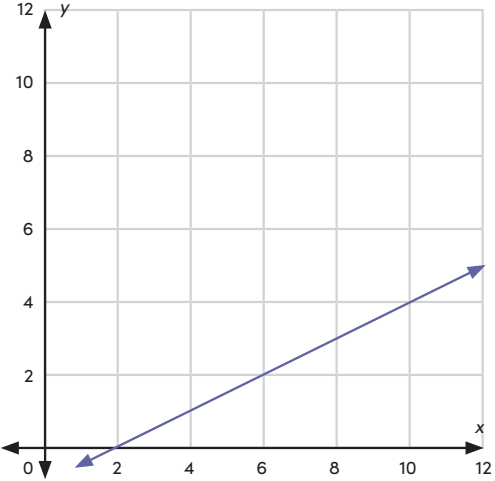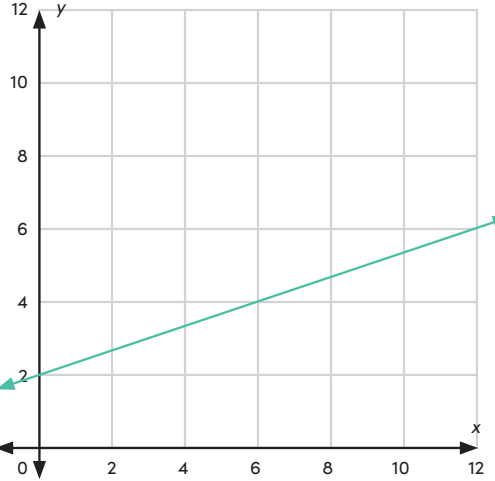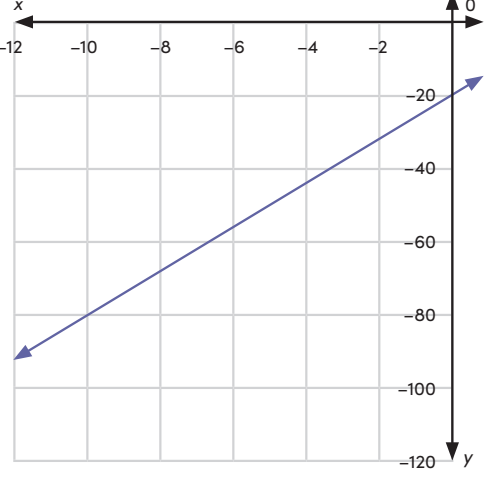

Rate of change =

_____

Rate of change =

_____

RATE OF CHANGE: GRAPHS

Keep going! Find the rate of change of each linear function below. Then circle the greater rate of change in each row.
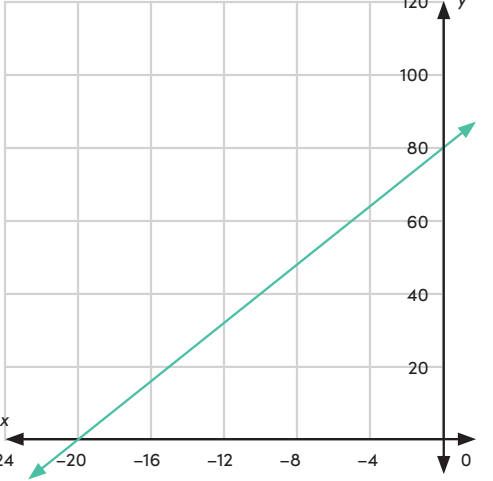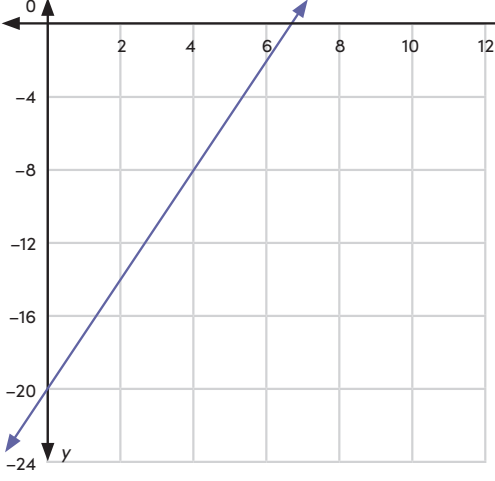

Rate of change =

_____

Rate of change =

_____

Rate of change =

_____

Rate of change =

_____

Rate of change =

_____

Rate of change =

_____