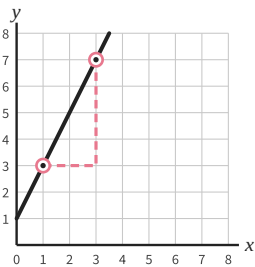


Gradient of a Line

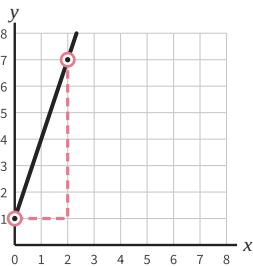
1 Across first, then up or down.

Work out the gradient of the line.



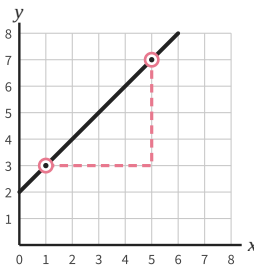
$$\frac{\text{change in } y}{\text{change in } x} = \frac{\boxed{}}{\boxed{2}} = \boxed{}$$

2 Work out the gradient of the line.



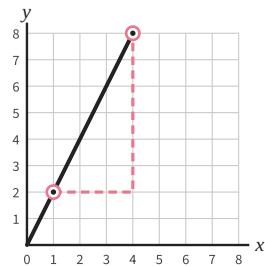
$$\frac{\text{change in } y}{\text{change in } x} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

3 Work out the gradient of the line.



$$\frac{\text{change in } y}{\text{change in } x} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

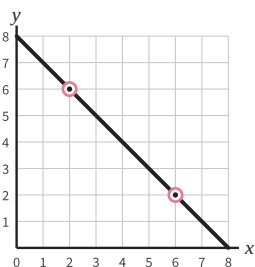
4 Work out the gradient of the line.



$$\frac{\text{change in } y}{\text{change in } x} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

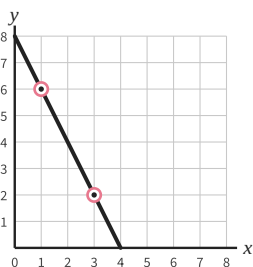
5 Notice the change!

Work out the gradient of the line.



$$\frac{\text{change in } y}{\text{change in } x} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

6 Work out the gradient of the line.



$$\frac{\text{change in } y}{\text{change in } x} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

7 A line passes through (1, 2) and (3, 8).
Work out its gradient.

Answer _____

8 A line passes through (0, 5) and (2, 1).
Work out its gradient.

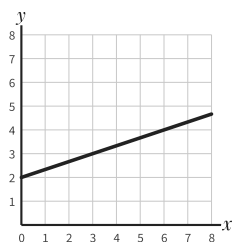
Answer _____

Gradient of a Line further practice

9 A line passes through (2, 1) and (5, 7).
Work out its gradient.

Gradient _____

10 Work out the gradient of the line.

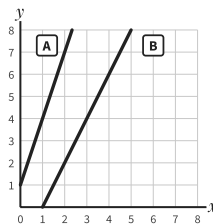


Gradient _____

11 A line passes through (-2, 3) and (2, -5). Work out its gradient.

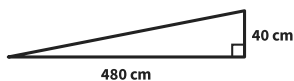
Gradient _____

12 Which line is steeper, A or B?
Show how you know.



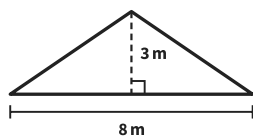
Answer _____

13 A ramp rises 40 cm over a horizontal distance of 480 cm. Work out the gradient of the ramp.



Gradient _____

14 The diagram shows the end of a roof. Work out the gradient of the left side of the roof.



Gradient _____

15 A path up a hill has a gradient of $\frac{1}{5}$. The path covers a horizontal distance of 150 m. How many metres does it climb?

Answer _____

16 Priya says the gradient of the line through (1, 6) and (4, 0) is 2. Is she right? Explain.

Answer _____