



Name: _____



Find the gradient of the line that passes through the two given points:

a) (5,7) and (6,9)

2

h) (2,2) and (7,27)

5

b) (1,3) and (3,9)

3

i) (6,7) and (10,39)

8

c) (6,1) and (7,6)

5

j) (7,1) and (16,19)

2

d) (2,1) and (3,4)

3

k) (3,15) and (6,3)

-4

e) (5,3) and (7,13)

5

l) (-2,15) and (20,3)

$-\frac{6}{11}$

f) (2,2) and (4,8)

3

m) (-3,-2) and (-5,8)

-5

g) (4,1) and (6,11)

5

n) (1,4) and (-3,-8)

3

Write an expression for the gradient between the given points (leave your answers in the simplest form)

a) (x,2) and (5, 3x)

$$\frac{3x - 2}{5 - x}$$

d) (1,2) and (x, 2x)

$$\frac{2x - 2}{x - 1} = 2$$

b) (1,x) and (6x,11)

$$\frac{11 - x}{6x - 1}$$

f) (4,10) and (2x, 5x)

$$\frac{5x - 10}{2x - 4} = \frac{5}{2}$$

c) (y, x) and (5y,4x)

$$\frac{3x}{4y}$$

f) (5y,2x) and (2y, 5x)

$$-\frac{x}{y}$$

Exam question:

The line AB passes through the points A = (2, -1) and B = (6, k).

The gradient of AB is 4.

Work out the value of k.

$$\frac{k + 1}{4} = 4 \quad k + 1 = 16 \quad k = 15$$

