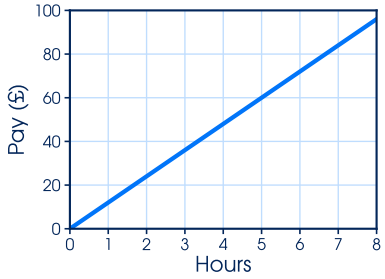
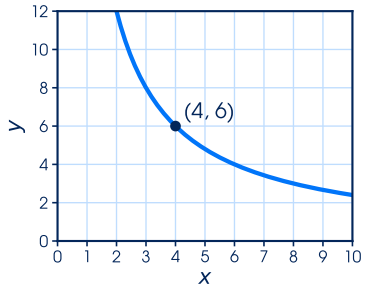
GCSE HIGHER · REVISION MAT 3

Gradients and proportion graphs

1 Find the hourly pay.



2 y is inversely proportional to x.



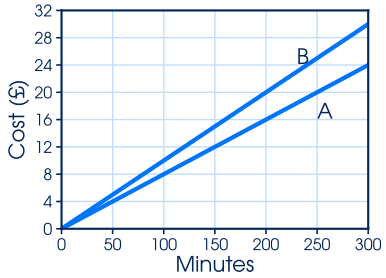
Find y when $x = 8$.

3 A graph passes through (0, 5) and has gradient 2.

Does it show direct proportion? Explain.

4 Two call plans charge per minute.

Find the difference in cost for 200 minutes.



5 Show that $y = 2.5x$ passes through (6, 15) and has gradient 2.5.

6 A 120 km journey takes $t = \frac{120}{s}$ hours at s km/h.

Find the speed for a time of 1.5 hours.

7 On a graph of cost against number of items, what does the gradient tell you?

8 y is directly proportional to x and the graph passes through (4, 10).

Find the gradient and x when $y = 35$.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Gradients and proportion graphs

1 $\frac{96}{8}$

£12 per hour

2 $xy = 24$

$y = 3$

3 **No: it does not pass through the origin.**

4 A: 8p/min, B: 10p/min

£16 and £20

£4

5 $2.5 \times 6 = 15$ ✓

Gradient = coefficient of x = 2.5

6 $s = \frac{120}{1.5}$

80 km/h

7 **The cost of one item.**

8 **Gradient 2.5**

$x = 14$