

Direct and Inverse Proportion

Topic Test 4 (20 minutes)

1 c is inversely proportional to d .

When $c = 1.6$, $d = 5$

Work out c when $d = 2$

[3 marks]

Answer _____

2 The time that Ella takes in minutes to drive to work is inversely proportional to her average speed in miles per hour.

It takes Ella 40 minutes when her average speed is 25 mph.

One day Ella leaves her home at 8 am and travels at an average speed of 30 mph.
What time will she arrive at work?

[4 marks]

Answer _____

3 (a) Two of the graphs below show that y is directly proportional to x .

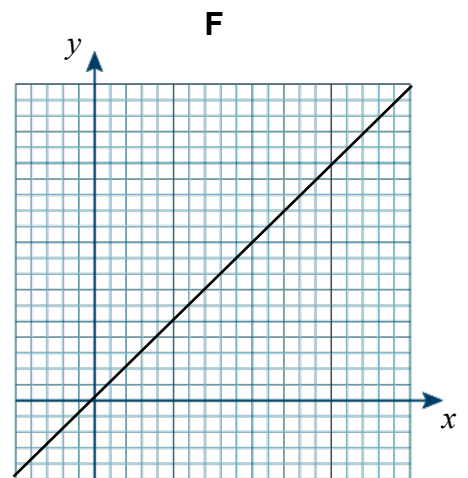
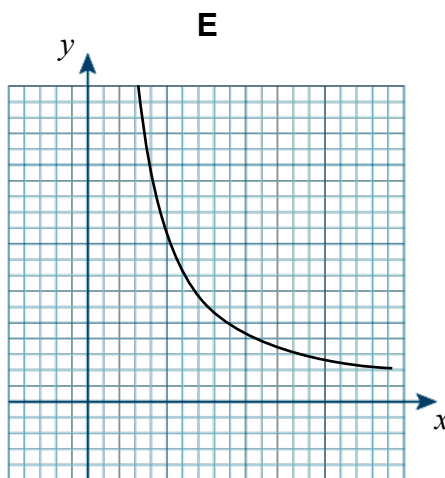
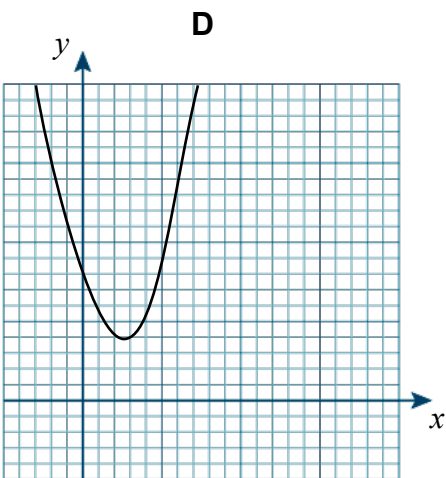
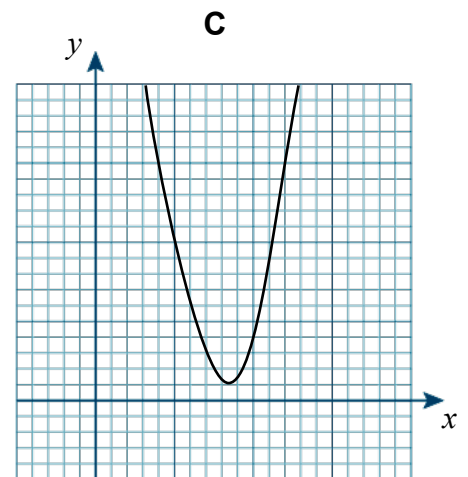
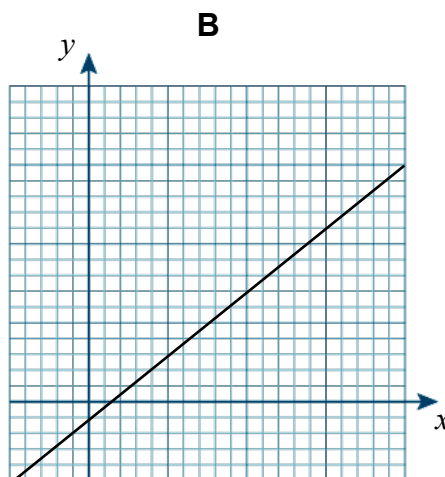
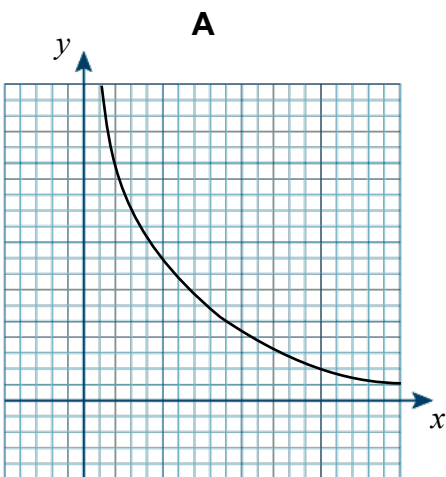
[1 mark]

These graphs are _____ and _____

3 (b) Two of the graphs below show that y is inversely proportional to x .

[1 mark]

These graphs are _____ and _____



4 m is directly proportional to n .

When $m = 4.5$, $n = 3$

4 (a) Write an equation for m in terms of n

[3 marks]

Answer _____

4 (b) Work out m when $n = 5$

[1 mark]

Answer _____

4 (c) Work out n when $m = 3$

[1 mark]

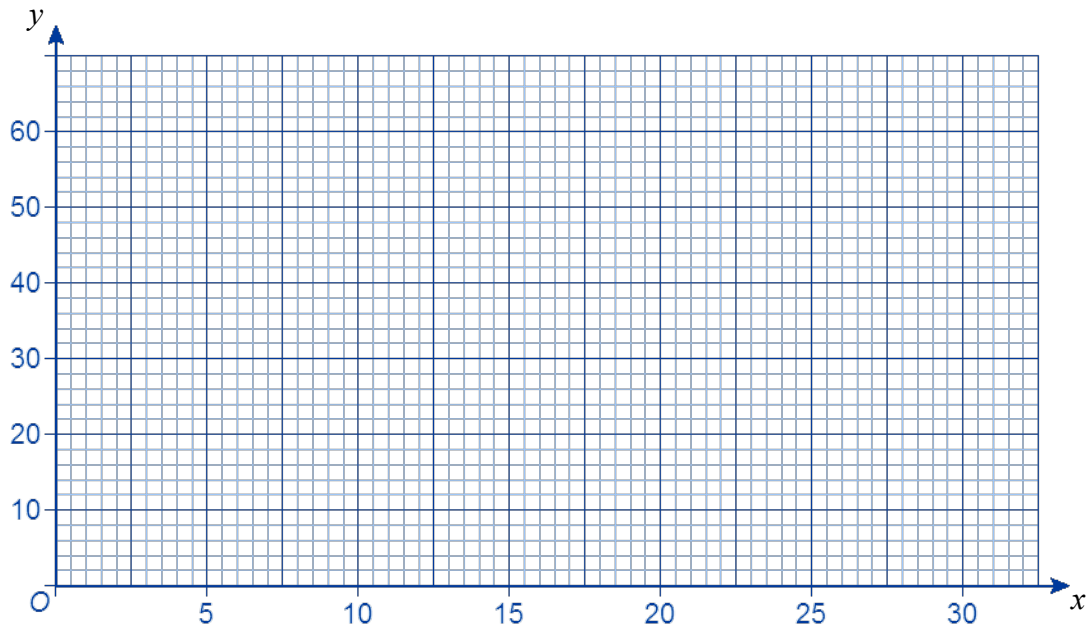
Answer _____

5 y is directly proportional to x .

When $y = 12$, $x = 6$

5 (a) Draw a graph that you can use to find x when you are given a value of y .

[2 marks]



5 (b) Use your graph to work out x when $y = 40$

[1 mark]

Answer _____

END OF QUESTIONS