

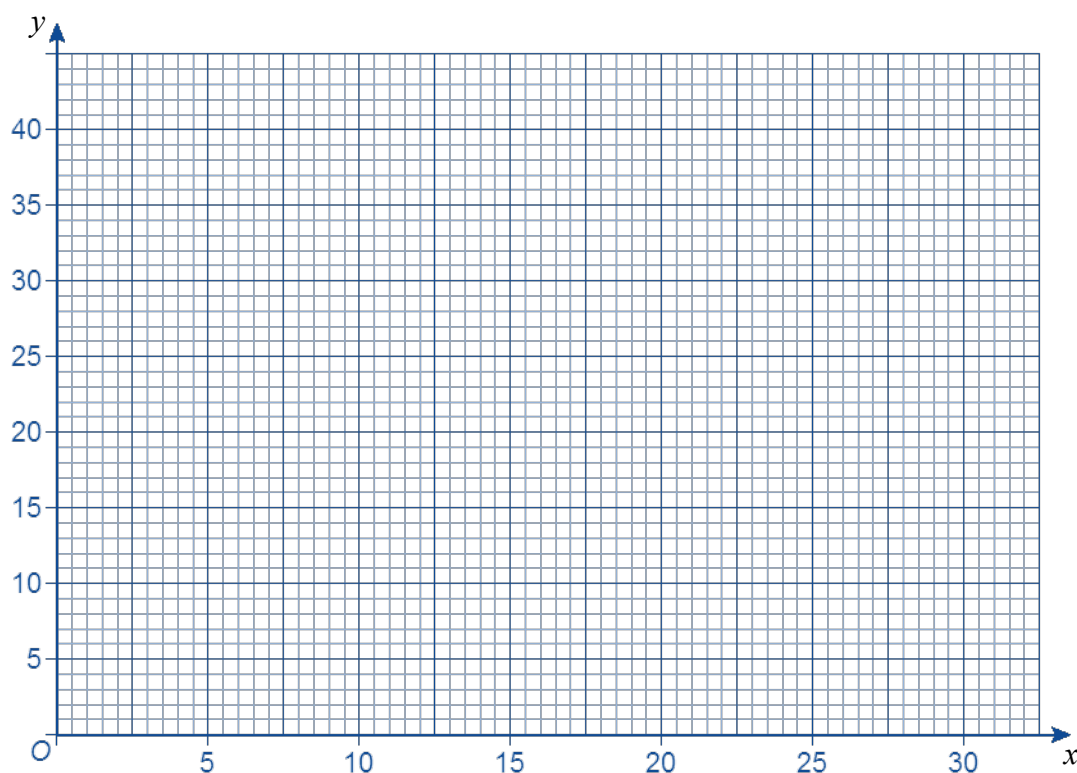
## Direct and Inverse Proportion Topic Test 2 (10 minutes)

1  $y$  is directly proportional to  $x$

When  $y = 8$ ,  $x = 6$

1 (a) Draw a graph that can be used to work out  $x$  if you have been given  $y$ .

[2 marks]



1 (b) Use your graph to work out the value of  $x$  when  $y = 20$

[1 mark]

Answer \_\_\_\_\_

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**2**  $d$  is inversely proportional to  $c$ .

When  $d = 4$ ,  $c = 4$

**2 (a)** Find an equation connecting  $d$  and  $c$

**[3 marks]**

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Answer \_\_\_\_\_

**2 (b)** Work out  $d$  when  $c = 8$

**[1 mark]**

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Answer \_\_\_\_\_

**2 (c)** Work out  $c$  when  $d = 3.2$

**[1 mark]**

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Answer \_\_\_\_\_

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**3** The time taken in hours ( $t$ ) for the rooms in a hotel to be cleaned in a morning is inversely proportional to the number of cleaning staff working ( $s$ )

It takes 3 hours to clean the rooms when 10 cleaners are working.

**3 (a)** Find an equation connecting  $t$  and  $s$ .

**[3 marks]**

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Answer \_\_\_\_\_

**3 (b)** How many room staff are needed to get the rooms cleaned in 2 hours

**[1 mark]**

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Answer \_\_\_\_\_

**END OF QUESTIONS**