

# m7 = 8 days to go!

7 The lengths of the sides of two squares are integers when measured in cm.

The difference between the areas of the two squares is  $28 \text{ cm}^2$

Find the difference between the lengths of the sides of the two squares.

Look square numbers

9, 16, 25, 36, 49, 64, 81, 100, 121, 144

169, 196, 225

gap  
28

gap  
9

$$\sqrt{36} = 6$$

$$\sqrt{64} = 8$$

Answer 2 cm [4]

4. On the grid, label the region that satisfies all three of these inequalities

$x < 3$

$y > -3$

$y > 2x$

$x = 3$

x	0	1	2	3
y	0	2	4	6

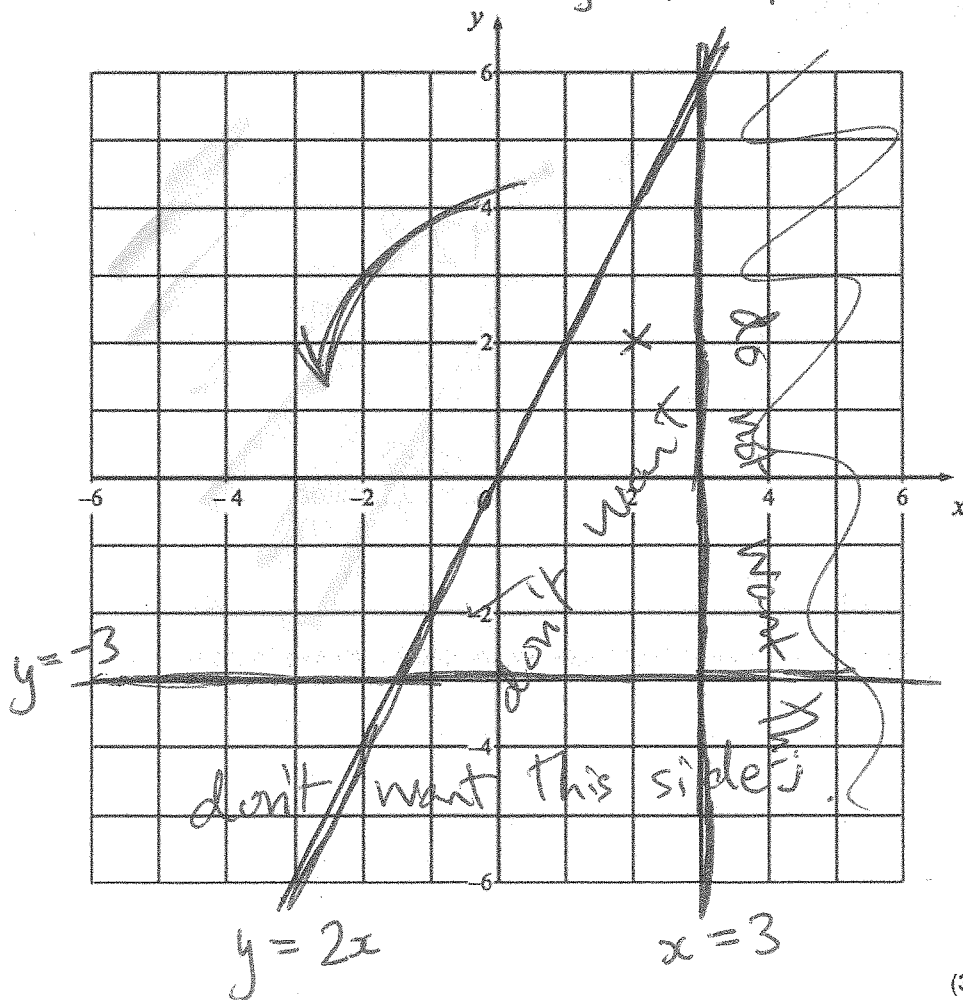
Draw lines  
then TEST POINT

Test point  
(2, 2)

$x < 3$   
 $2 < 3$   
yes

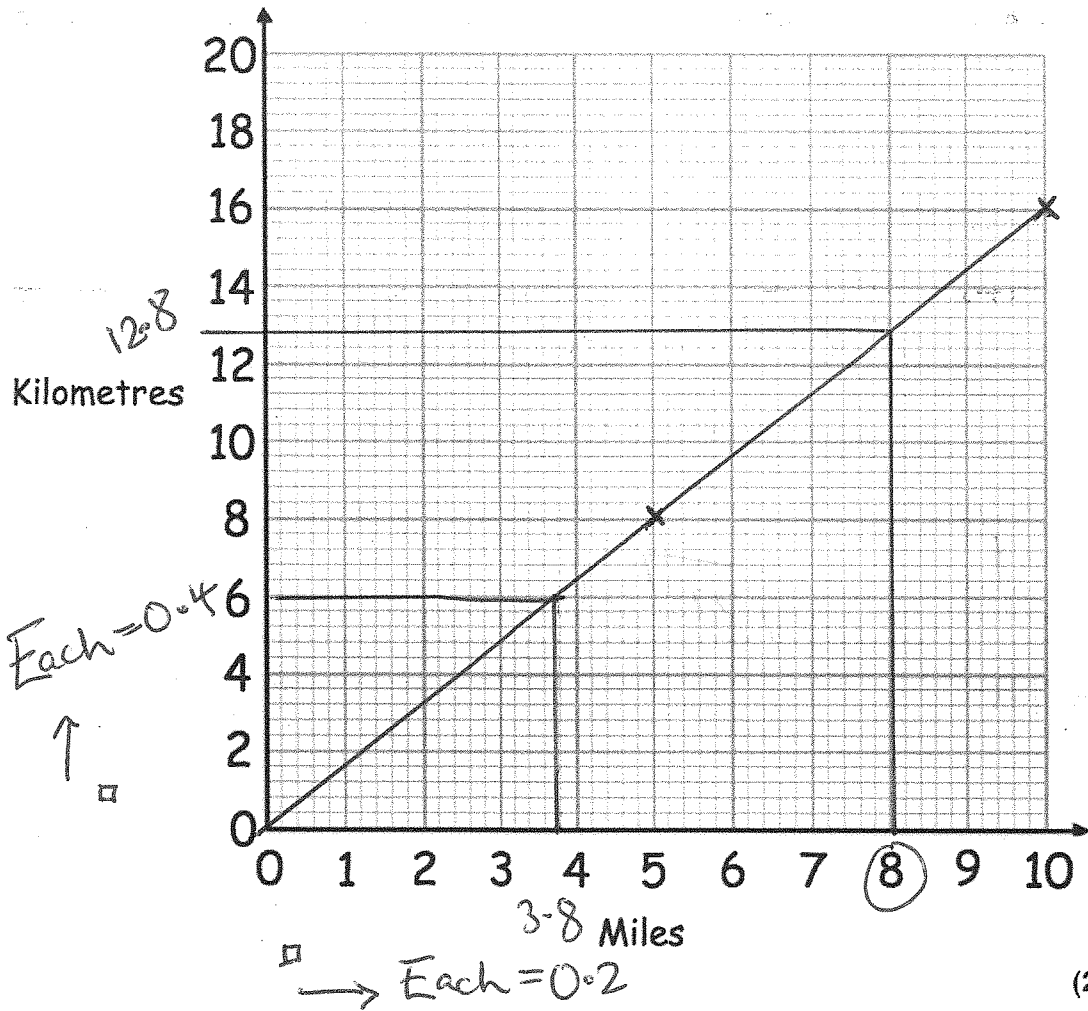
$y > -3$   
 $2 > -3$   
yes

$y > 2x$   
 $2 > 2(2)$   
 $2 > 4$   
No



(3)

8. (a) Use the fact 5 miles = 8 kilometres to draw a conversion graph on the grid.



Use your graph to convert

(b) 8 miles to kilometres

..... 12.8 km  
(1)

(c) 6 kilometres to miles

6 km

..... 3.8 miles  
(1)