

Year 9 Class 6 questions

Q1

Solve the equation to find a .

$$12 + 8a = 100$$

$$a = \boxed{} \quad \boxed{11}$$

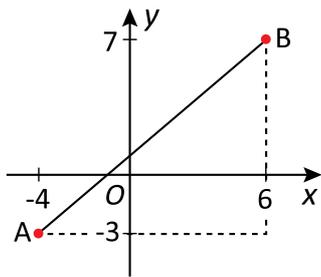
Q2

Solve the equation to find y .

$$9y + 12 = 6y + 48$$

$$y = \boxed{} \quad \boxed{12}$$

Q3



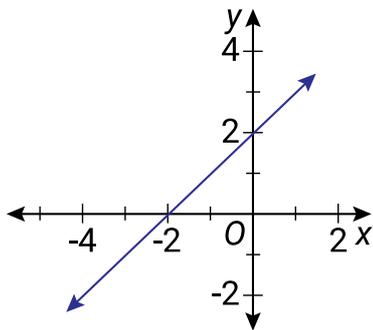
Find the length of the interval AB.

$$AB = \boxed{} \text{ (1 d.p.)}$$

14.1

Q4

Which equation matches the graph?



- $y = x + 2$
- $y = 2x - 2$
- $y = x - 2$
- $y = 2x + 2$

Q5

The line $3x + 2y = 12$ cuts the x -axis at

- (0,6)
- (6,0)
- (4,0)
- (-4,0)

Q6

Solve the equation to find a .

$$25 = 3a + 10$$

$$a = \boxed{} \quad \boxed{5}$$

Q7

Solve the equation to find a .

$$131 = 11 - 15a$$

$$a = \boxed{} \quad \boxed{-8}$$

Q8

Solve the equation to find z .

$$-30 - 4z = 72 - 2z$$

$$z = \boxed{} \quad \boxed{-51}$$

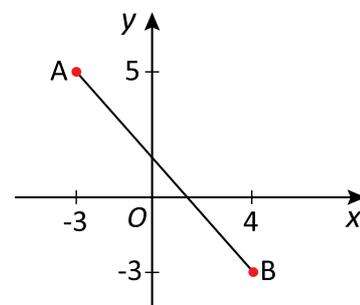
Q9

Solve the equation to find b .

$$20 + 3b = 13 - 7b$$

$$b = \boxed{} \quad \boxed{-0.7}$$

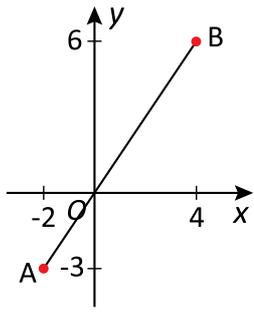
Q10



Find the length of the interval AB.

$$AB = \boxed{} \text{ (1 d.p.)}$$

10.6

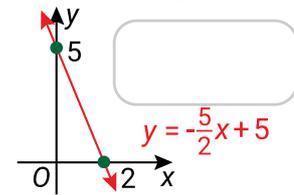
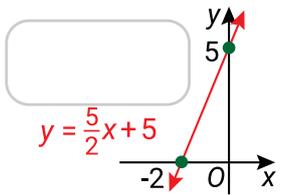
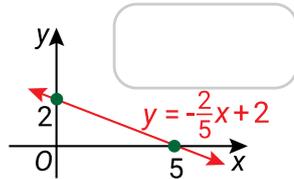
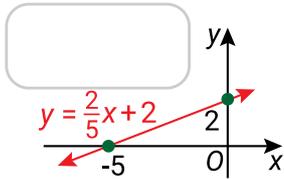
Q11

Find the length of the interval AB.

AB = (1 d.p.)
10.8

Q12

Match the graphs with their equations.



$y = \frac{2}{5}x + 2$

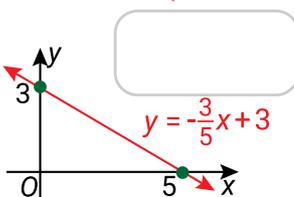
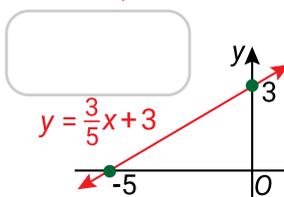
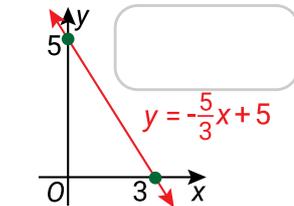
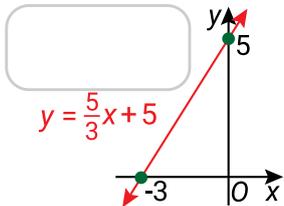
$y = -\frac{5}{2}x + 5$

$y = \frac{5}{2}x + 5$

$y = -\frac{2}{5}x + 2$

Q13

Match the graphs with their equations.



$y = -\frac{3}{5}x + 3$

$y = \frac{3}{5}x + 3$

$y = \frac{5}{3}x + 5$

$y = -\frac{5}{3}x + 5$

Q14

Which line cuts the x-axis at $\frac{2}{5}$?

$y = 2x - 5$

$2x + 3y - 5 = 0$

$y = 5x + 2$

$10x + y - 4 = 0$

Q15

Which line cuts the x-axis at $2\frac{1}{3}$?

$y = 7 - 3x$

$3x - 4y = 2$

$5x + y = 11$

$4x + 3y - 7 = 0$

Q16

Solve the equation to find b .

$2b + 42 = 5b$

$b = \text{input} \quad 14$

Q17

Solve the equation to find y .

$4y - 36 = 5y$

$y = \text{input} \quad -36$

Q18

Solve the equation to find c .

$189 - 6c = 15c$

$c = \text{input} \quad 9$

Q19Solve the equation to find a .

$$5a + 12 + a = 4a + 20$$

$$a = \boxed{} \quad 4$$

Q20Solve the equation to find b .

$$8b + 8 - 3b = 24 + 3b$$

$$b = \boxed{} \quad 8$$

Q21Solve the equation to find c .

$$8c + 15 - 3c = 36 + 2c$$

$$c = \boxed{} \quad 7$$

Q22

Find the distance between the points A(-4,2) and B(2,-3).

HINT: A sketch may help.

$$AB = \boxed{} \text{ (1 d.p.)}$$

7.8

Q23

Find the distance between the points A(8,-2) and B(-2,9).

HINT: A sketch may help.

$$AB = \boxed{} \text{ (1 d.p.)}$$

14.9

Q24

Find the distance between the points A(2,7) and B(0,-3).

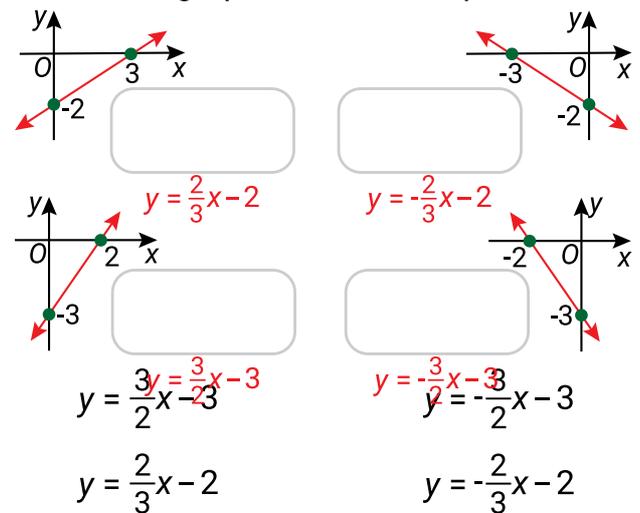
HINT: A sketch may help.

$$AB = \boxed{} \text{ (1 d.p.)}$$

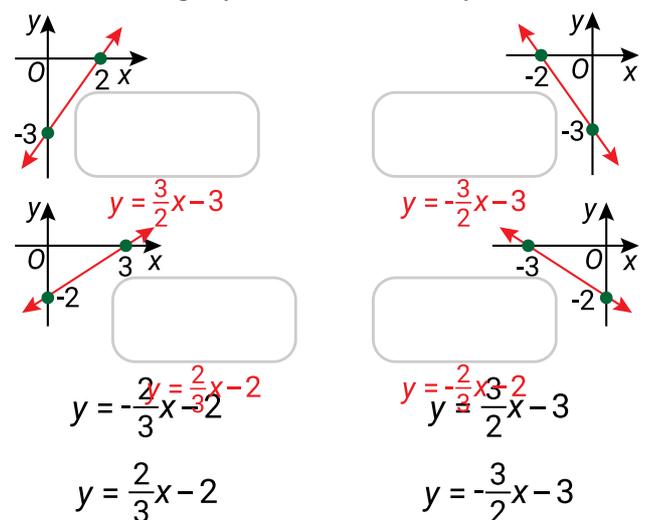
10.2

Q25

Match the graphs with their equations.

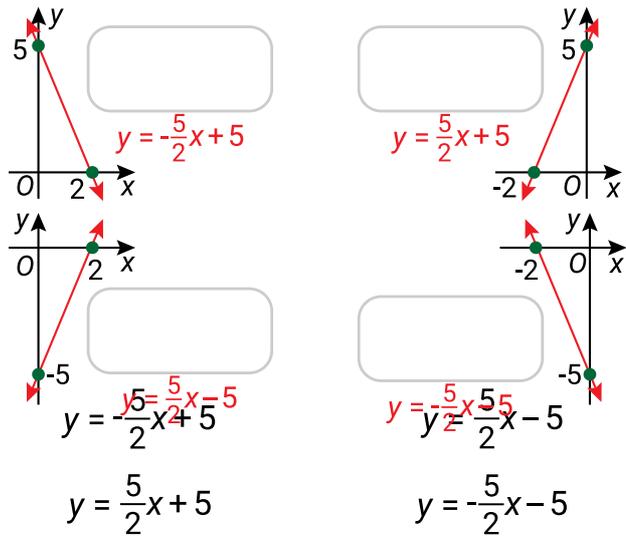
**Q26**

Match the graphs with their equations.



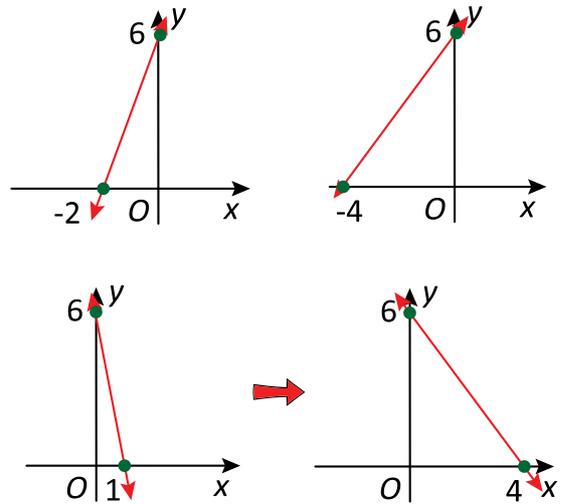
Q27

Match the graphs with their equations.



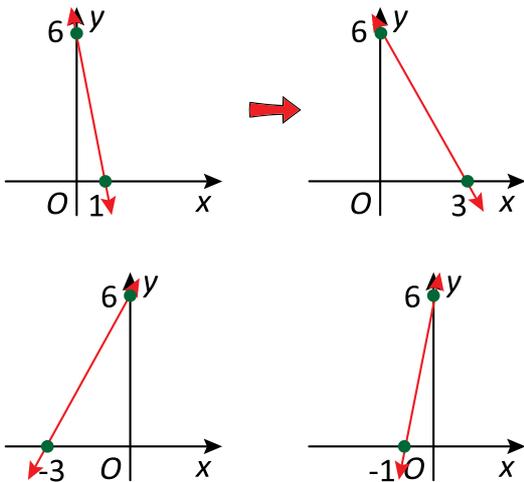
Q29

Choose the graph described by $3x + 2y - 12 = 0$.



Q28

Choose the graph described by $2x + y - 6 = 0$.



Q30

Choose the graph described by $10x - 3y - 8 = 0$.

