Year 9 Class 7 questions

Q1

Find the distance between the points (1,–1) and (–4,2).

☐ (1 d.p.)

Q2

Find the distance between the points (3,–2) and (5,–9).

☐ (1 d.p.)

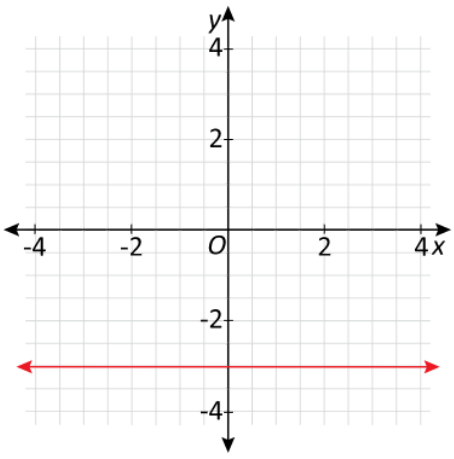
Q3

Is the graph of $x = \frac{1}{3}$ a horizontal or a vertical line?

○ horizontal line ○ vertical line

Q4

What is the equation of this line?



○ $y = -3x$

○ $y = 3 - x$

○ $x = -3$

○ $y = -3$

Q5

Complete the table for $y = 2x - 1$.

x	0	1	2	3
y				

Q6

Choose all the points which lie on the line $y = 7 - 3x$.

☐ (6,-11) ☐ (2,1)

☐ (-5,22) ☐ (-3,15)

Q7

Which of these points is closest to the origin (0,0)?

○ (6,2) ○ (3,–5)

○ (–4,4) ○ (7,1)

Q8

Which of these points is closest to the origin (0,0)?

○ (6,4) ○ (–3,7)

○ (8,–2) ○ (5,5)

Q9

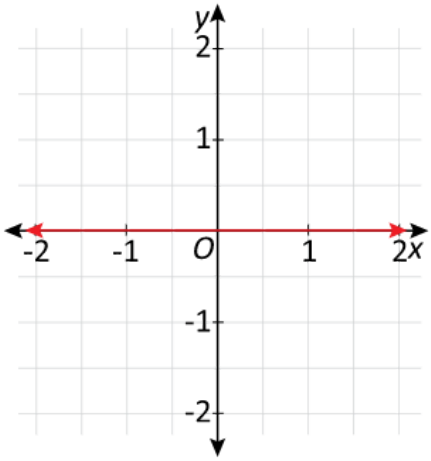
Which of these points is closest to the origin (0,0)?

○ (9,–3) ○ (10,2)

○ (–7,5) ○ (8,4)

Q10

What is the equation of this line?



- ○ $y = x$
- ○ $x = 0$
- ○ $y = 0$
- ○ $y = 1$

Q11

What is the equation of the horizontal line passing through (-6,3)?

- ○ $x = -6$
- ○ $x = 3$
- ○ $y = 3$
- ○ $y = -6$

Q12

What is the equation of the vertical line passing through (-6,3)?

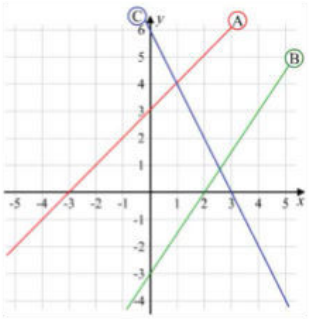
- ○ $x = -6$
- ○ $x = 3$
- ○ $y = 3$
- ○ $y = -6$

Q13

Complete the table for $y = 6 - 2x$.

x	0	1	2	3
y				

Which is the graph of $y = 6 - 2x$?



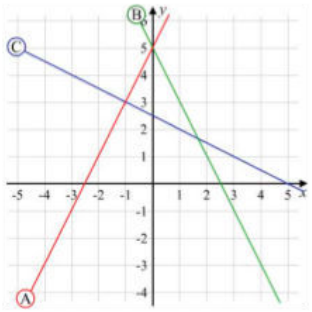
- ○ A
- ○ B
- ○ C

Q14

Complete the table for $y = 5 - 2x$.

x	0	1	2	3
y				

Which is the graph of $y = 5 - 2x$?



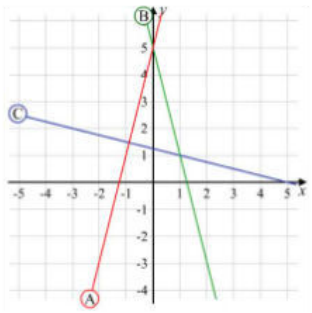
- ○ A
- ○ B
- ○ C

Q15

Complete the table for $y = 5 - 4x$.

x	0	1	2	3
y				

Which is the graph of $y = 5 - 4x$?



- ○ A
- ○ B
- ○ C

Q16

Choose all the points which lie on the line $5x + y = 8$.

- ☐ (3,-7)
- ☐ (-1,13)
- ☐ (-3,21)
- ☐ (2,-2)

Q17

Choose all the points which lie on the line $x - 4y + 7 = 0$.

- ☐ (-3,0)
- ☐ (13,5)
- ☐ (5,3)
- ☐ (1,2)

Q18

Choose all the points which lie on the line $x+3y-9=0$.

- ☐ (0,3)
- ☐ (-6,5)
- ☐ (6,-1)
- ☐ (3,2)

Q19

A triangle has vertices A(–2,–1), B(2,2) and C(1,–5).

Find the length of AB. ☐

Find the length of AC. ☐

Find the length of BC. ☐ (1 d.p.)

What type of triangle is ABC?

○ equilateral ○ scalene ○ isosceles

Q20

A triangle has vertices A(–2,–1), B(4,7) and C(–8,9).

Find the length of AB. ☐

Find the length of AC. ☐ (1 d.p.)

Find the length of BC. ☐ (1 d.p.)

What type of triangle is ABC?

○ equilateral ○ isosceles ○ scalene

Q21

Q22

Find the equation of the line which is parallel to the *y*-axis and passes through the point (4,-5).

- ○ $x = -5$
- ○ $x = 4$
- ○ $y = 4$
- ○ $y = -5$

Q23

Find the equation of the line which is parallel to the *x*-axis and passes through the point (-2,-6).

- ○ $x = -6$
- ○ $x = -2$
- ○ $y = -6$
- ○ $y = -2$

Q24

Find the equation of the line which is parallel to the *x*-axis and passes through the point (5,-8).

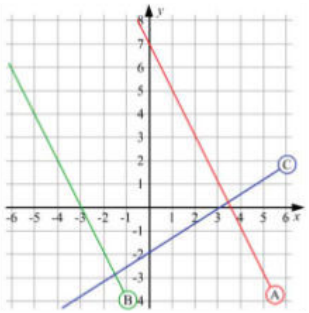
- ○ $x = -8$
- ○ $x = 5$
- ○ $y = 5$
- ○ $y = -8$

Q25

Complete the table for $y+2x=7$.

x	0	1	2	3
y				

Which is the graph of $y+2x=7$?



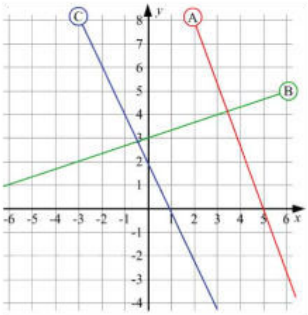
○ A
○ B
○ C

Q26

Complete the table for $y=\frac{x}{3}+3$.

x	-3	0	3	6
y				

Which is the graph of $y=\frac{x}{3}+3$?



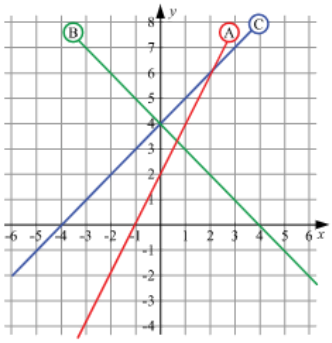
○ A
○ B
○ C

Q27

Complete the table for $y - x = 4$.

x	0	1	2	3
y				

Which is the graph of $y - x = 4$?



- ○ A
- ○ B
- ○ C

Q28

Which lines pass through the point (-2,4)?

- ☐ $y = -2x$
- ☐ $y = 3x + 11$
- ☐ $y = 2 - x$
- ☐ $2x - 3y + 16 = 0$

Q29

Which lines pass through the point (5,-3)?

- ☐ $y = 7 - 2x$
- ☐ $2x + 7y + 11 = 0$
- ☐ $y = 4x - 21$
- ☐ $3x + 7y - 1 = 0$

Q30

Which lines pass through the point (4,-8)?

- ☐ $y = 4x - 22$
- ☐ $3x - 8y - 76 = 0$
- ☐ $y = 4 - 3x$
- ☐ $3x + 4y + 18 = 0$