Year 8 Class 17 questions

Q1

Write the coordinates of the points shown.
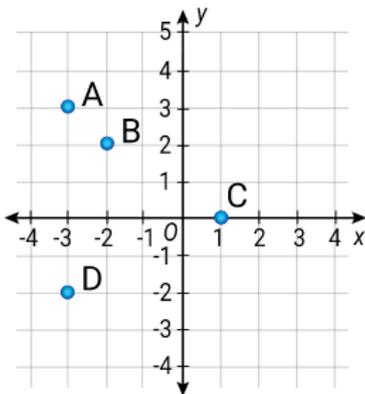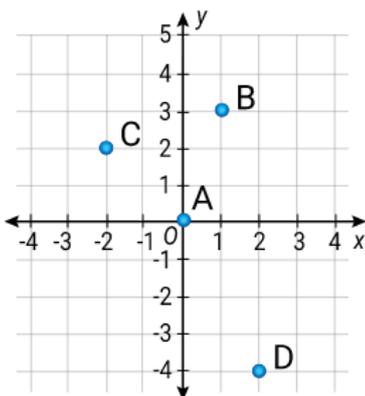
$A\left(\boxed{}\right)$

$B\left(\boxed{}\right)$

$C\left(\boxed{}\right)$

$D\left(\boxed{}\right)$

Q2

Write the coordinates of the points shown.

$A\left(\boxed{}\right)$

$B\left(\boxed{}\right)$

$C\left(\boxed{}\right)$
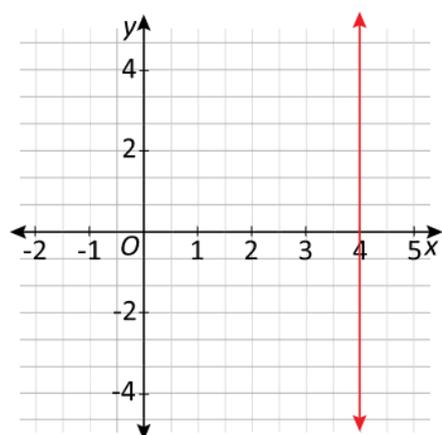
$D\left(\boxed{}\right)$

Q3

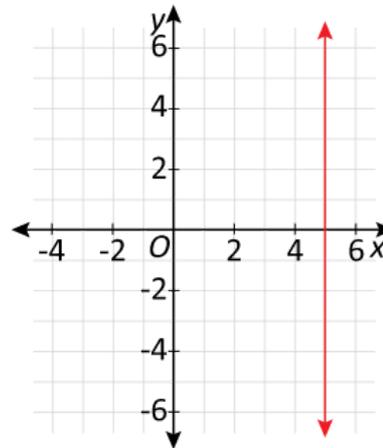What is the equation of this line?

- $y = 4$
- $x = 4$
- $y = x + 4$
- $x = 4y$

Q4

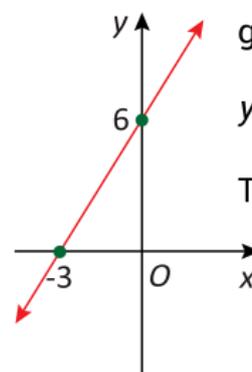What is the equation of this line?

- $y = 5$
- $x = 5$
- $y = 5x$
- $y = x + 5$

Q5

Where does the line $y = 2x - 6$ cut the y-axis?

$\left(\boxed{}, \boxed{}\right)$

Q6

gradient = $\boxed{}$

y-intercept = $\boxed{}$

The line has equation:

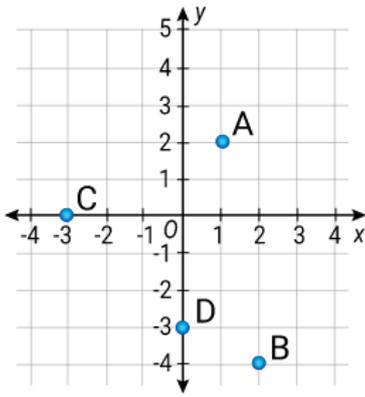- $y = 6x + 2$
- $y = 2x + 6$
- $y = -3x + 6$

Q7

Write the letters at the point shown.

(1,2) = ☐

(-3,0) = ☐

(2,-4) = ☐

(0,-3) = ☐

Q8

Write the letters at the point shown.
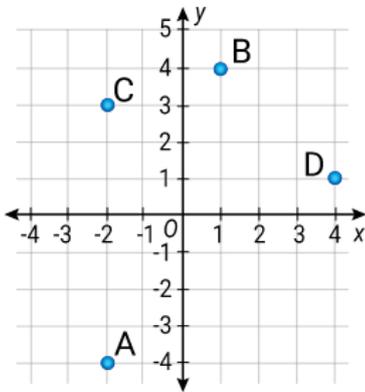
(-2,3) = ☐

(4,1) = ☐

(-2,-4) = ☐

(1,4) = ☐

Q9

Write the letters at the point shown.
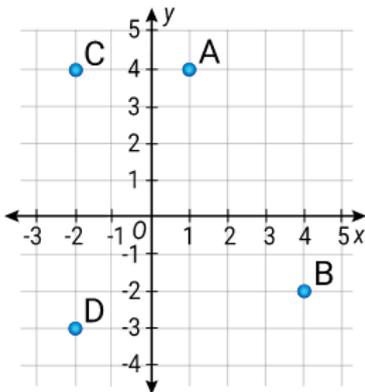
(1,4) = ☐

(-2,4) = ☐

(-2,-3) = ☐

(4,-2) = ☐

Q10

What is the equation of the vertical line passing through $(8, 4)$?

○ $x = 8$ ○ $x = 4$

○ $y = 4$ ○ $y = 8$

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

Which is the steepest line?

○ $y = 5 - 2x$ ○ $y = -x + 3$

○ $y = 2x$ ○ $y = 5x$

Q14

Which is the steepest line?

○ $y = \frac{x}{2}$ ○ $y = \frac{x}{4} + 1$

○ $y = x$ ○ $y = -\frac{x}{3}$
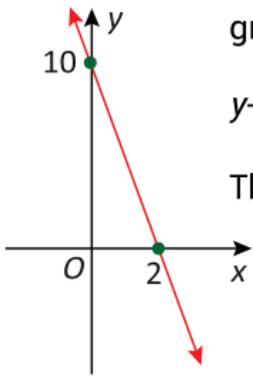
Q15

Which is the steepest line?

○ $y = \frac{x}{2}$ ○ $y = 0$

○ $y = x$ ○ $y = -\frac{x}{3}$

Q16

gradient = ☐

y-intercept = ☐

The line has equation:
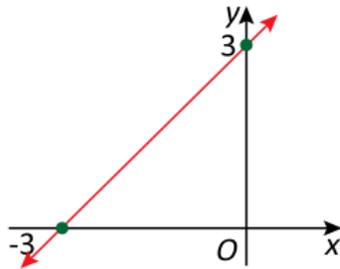- ○ $y = 10 - 5x$
- ○ $y = 10 + 5x$
- ○ $y = 10 + 2x$

Q17

Which equation matches the graph?

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

Q18

Which equation matches the graph?

- ○ $y = x + 4$
- ○ $y = x - 4$
- ○ $y = -4x$
- ○ $y = \frac{x}{4}$
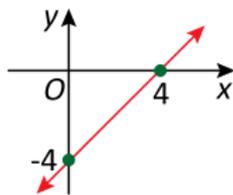
Q19

Choose **ALL** the true facts.

- ☐ (1,2) lies in the 1st quadrant.
- ☐ (-7,4) lies in the 4th quadrant.
- ☐ (-1,2) lies in the 2nd quadrant.

Q20

Choose **ALL** the true facts.

- ☐ (5,1) lies in the 3rd quadrant.
- ☐ (-2,5) lies in the 2nd quadrant.
- ☐ (1,0) lies on the x-axis.

Q21

Choose **ALL** the true facts.

- ☐ (-6,8) lies in the 4th quadrant.
- ☐ (0,2) lies on the y-axis.
- ☐ (-5,-1) lies in the 3rd quadrant.

Q22

Find the equation of the line which is parallel to the y-axis and passes through the point (-7, 5).

- ○ $x = 5$
- ○ $x = -7$
- ○ $y = 5$
- ○ $y = -7$

Q23

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

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

Q24

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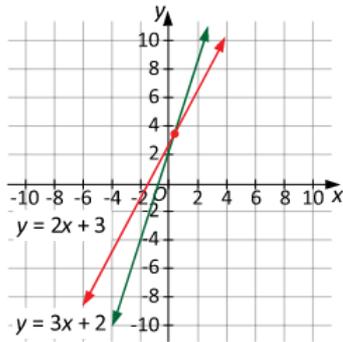
- ○ $x = -5$
- ○ $x = 4$
- ○ $y = 4$
- ○ $y = -5$

Q25

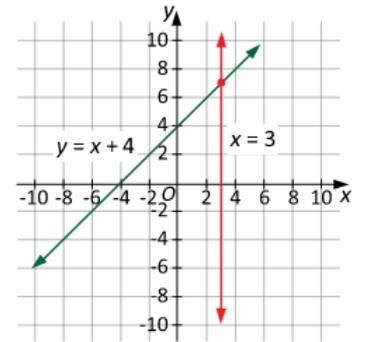The graph shows the lines $y = 3x + 2$ and $y = 2x + 3$.

Which line is steeper?

○ $y = 3x + 2$ ○ $y = 2x + 3$

Which has *y*-intercept (0,3)?

○ $y = 3x + 2$ ○ $y = 2x + 3$

Q26

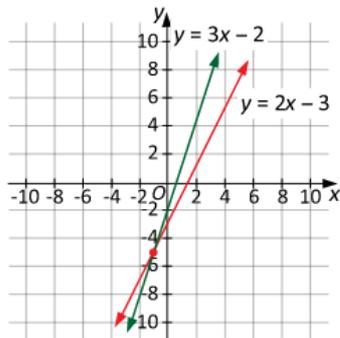The graph shows the lines $y = 2x - 3$ and $y = 3x - 2$.

Which line is steeper?

○ $y = 2x - 3$ ○ $y = 3x - 2$

Which point lies on both lines?

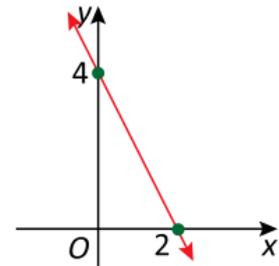○ (-1,-5)   ○ (-5,-1)   ○ (-1,5)   ○ (1,-5)

Which line cuts the *y*-axis at the highest point?

○ $y = 2x - 3$ ○ $y = 3x - 2$

Q27

The graph shows the lines $x = 3$ and $y = x + 4$.

Which has *y*-intercept (0,4)?

○ $x = 3$ ○ $y = x + 4$

Which point lies on both lines?

○ (0,4)   ○ (7,3)   ○ (3,0)   ○ (3,7)

Q28

Which equation matches the graph?
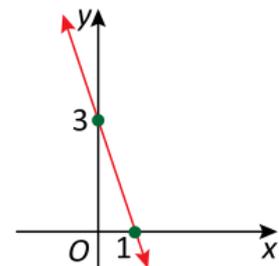
○ $y = -2x - 4$

○ $y = 2x + 4$

○ $y = -2x + 4$

○ $y = x^2 - 4$

Q29

Which equation matches the graph?

○ $y = x^2 + 3$

○ $y = -3x$

○ $y = x + 3$

○ $y = -3x + 3$

Q30

Which equation matches the graph?

○ $y = -\dfrac{x}{3}$

○ $y = x^2 - 3$

○ $y = -\dfrac{3x}{2} + 3$

○ $y = \dfrac{3x}{2} - 3$