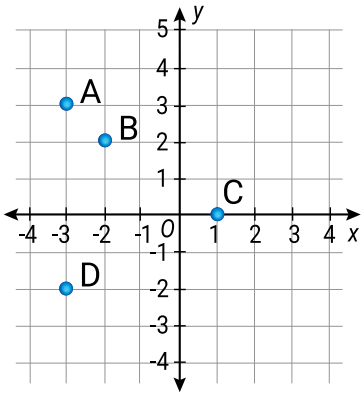
Year 8 Class 17 questions

Q1

Write the coordinates of the points shown.



A (-3,3)

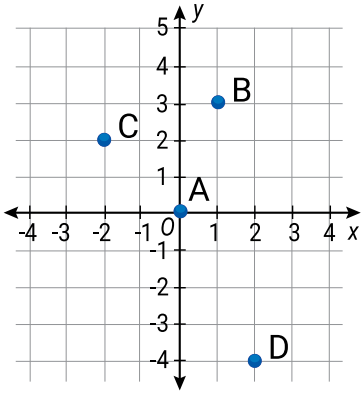
B (-2,2)

C (1,0)

D (-3,-2)

Q2

Write the coordinates of the points shown.



A (0,0)

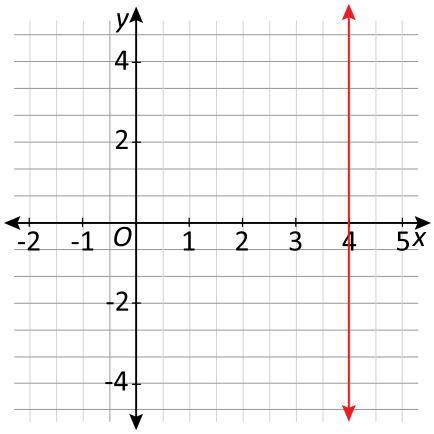
B (1,3)

C (-2,2)

D (2,-4)

Q3

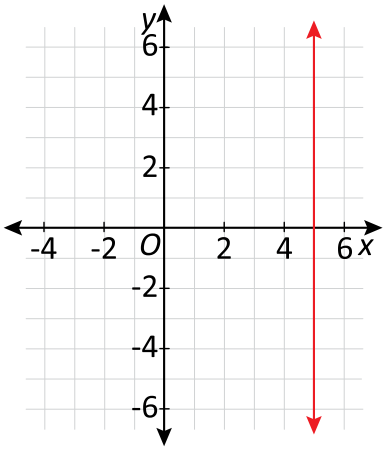
What is the equation of this line?



- ○ $y = 4$
- → ○ $x = 4$
- ○ $y = x + 4$
- ○ $x = 4y$

Q4

What is the equation of this line?



- ○ $y = 5$
- → ○ $x = 5$
- ○ $y = 5x$
- ○ $y = x + 5$

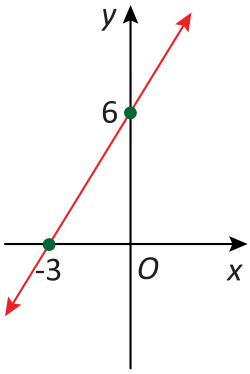
Q5

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

(,)

(0, -6)

Q6



gradient = 2

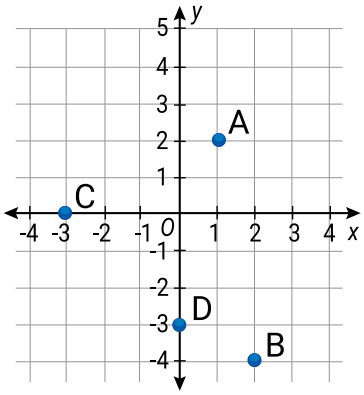
y-intercept = 6

The line has equation:

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

Q7

Write the letters at the point shown.



(1,2) = ☐ A

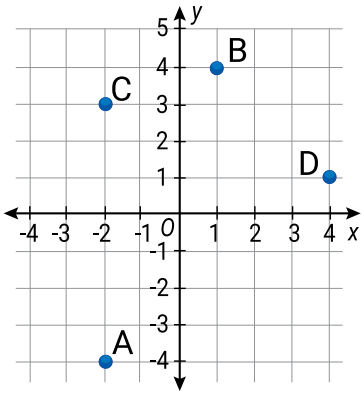
(-3,0) = ☐ C

(2,-4) = ☐ B

(0,-3) = ☐ D

Q8

Write the letters at the point shown.



(-2,3) = ☐ C

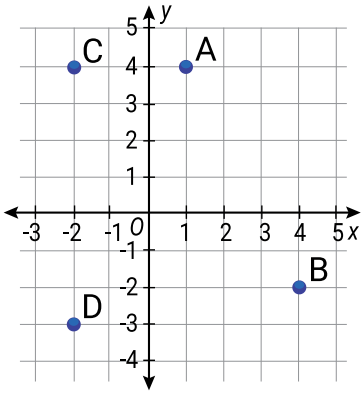
(4,1) = ☐ D

(-2,-4) = ☐ A

(1,4) = ☐ B

Q9

Write the letters at the point shown.



(1,4) = ☐ A

(-2,4) = ☐ C

(-2,-3) = ☐ D

(4,-2) = ☐ B

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?

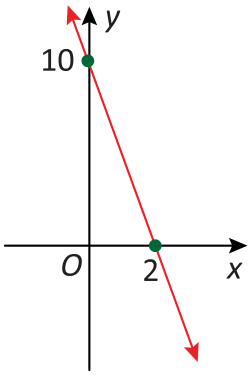
- ○ $y = \frac{x}{2}$
- ○ $y = \frac{x}{4} + 1$
- ➔ ○ $y = x$
- ○ $y = -\frac{x}{3}$

Q15

Which is the steepest line?

- ○ $y = \frac{x}{2}$
- ○ $y = 0$
- → ○ $y = x$
- ○ $y = -\frac{x}{3}$

Q16



gradient = ☐ -5

y-intercept = ☐ 10

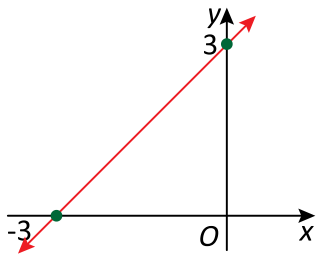
The line has equation:

- → ○ $y = 10 - 5x$
- ○ $y = 10 + 5x$
- ○ $y = 10 + 2x$

Q17

Which equation matches the graph?

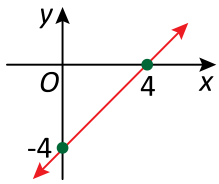
- ○ $y = 3x$
- → ○ $y = x + 3$
- ○ $y = x - 3$
- ○ $y = \frac{x}{3}$



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).

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

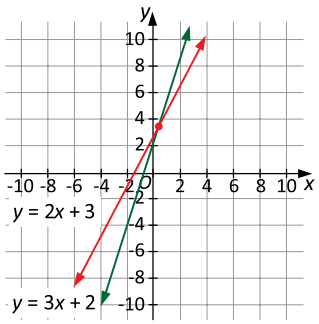
Q24

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?

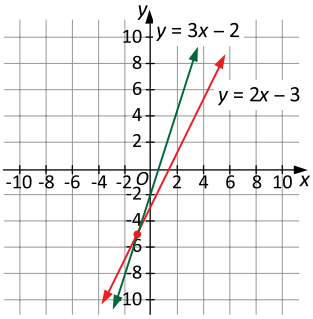
- [x] $y = 3x + 2$
- [ ] $y = 2x + 3$

Which has y-intercept (0,3)?

- [ ] $y = 3x + 2$
- [x] $y = 2x + 3$

Q26

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



Which line is steeper?

- [ ] $y = 2x - 3$
- [x] $y = 3x - 2$

Which point lies on both lines?

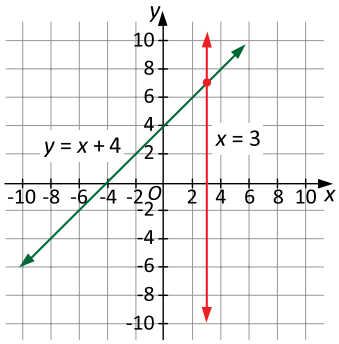
- [x] (-1,-5)
- [ ] (-5,-1)
- [ ] (-1,5)
- [ ] (1,-5)

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

- [ ] $y = 2x - 3$
- [x] $y = 3x - 2$

Q27

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



Which has y-intercept (0,4)?

- [ ] $x = 3$
- [x] $y = x + 4$

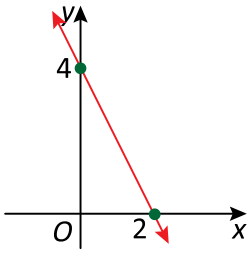
Which point lies on both lines?

- [ ] (0,4)
- [ ] (7,3)
- [ ] (3,0)
- [x] (3,7)

Q28

Which equation matches the graph?

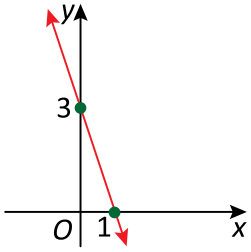
- [ ] $y = -2x - 4$
- [ ] $y = 2x + 4$
- [x] $y = -2x + 4$
- [ ] $y = x^2 - 4$



Q29

Which equation matches the graph?

- [ ] $y = x^2 + 3$
- [ ] $y = -3x$
- [ ] $y = x + 3$
- [x] $y = -3x + 3$



Q30

Which equation matches the graph?

- $y = -\frac{x}{3}$
- $y = x^2 - 3$
- $y = -\frac{3x}{2} + 3$
- $y = \frac{3x}{2} - 3$