

Year 9 Class 8 questions

Q1

Find the coordinates of M, the **midpoint** of the interval joining A(2,3) and B(4,1).

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

(3,2)

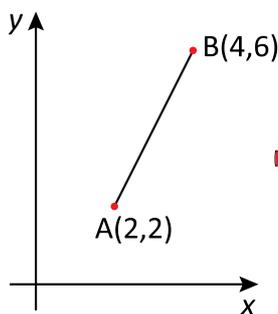
Q2

Find the coordinates of M, the **midpoint** of the interval joining A(8,2) and B(-2,-2).

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

(3,0)

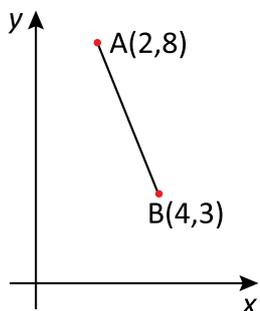
Q3



Find the gradient of the interval AB.

- 2 $\frac{3}{2}$
 $\frac{1}{2}$ 3

Q4



Find the gradient of the interval AB.

- 3 $-\frac{5}{2}$
 $-\frac{5}{3}$ -2

Q5

Find the gradient of the straight line joining A(1,9) and B(5,2).

- $-\frac{5}{8}$ $\frac{7}{4}$ $-\frac{4}{7}$ $-\frac{7}{4}$

Q6

Find the **y-intercept** of the straight line $y = 5x + 2$

- 5 -2
 2 5

Q7

Find the coordinates of M, the **midpoint** of the interval joining A(-5,6) and B(13,2).

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

(4,4)

Q8

Find the coordinates of M, the **midpoint** of the interval joining A(-5,0) and B(-1,4).

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

(-3,2)

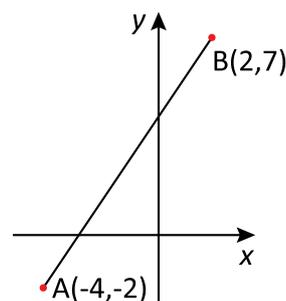
Q9

Find the coordinates of M, the **midpoint** of the interval joining A(-2,-2) and B(0,4).

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

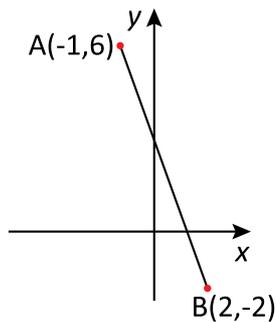
(-1,1)

Q10



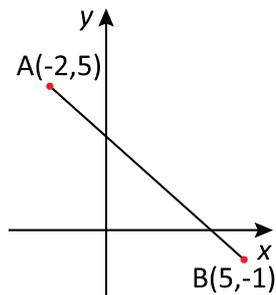
Find the gradient of the interval AB.

- 2 $\frac{3}{4}$
 $\frac{2}{3}$ $\frac{3}{2}$

Q11

Find the gradient of the interval AB.

- $-\frac{7}{3}$ $-\frac{8}{3}$
 -3 $-\frac{3}{8}$

Q12

Find the gradient of the interval AB.

- $-\frac{7}{6}$ $-\frac{6}{7}$
 $\frac{6}{7}$ $-\frac{6}{5}$

Q13

Find the gradient of the straight line joining A(2,8) and B(-5,0).

- $\frac{7}{8}$ $\frac{5}{8}$ $-\frac{8}{7}$ $\frac{8}{7}$

Q14

Find the gradient of the straight line joining A(1,1) and B(4,0).

- -3 $-\frac{1}{3}$ $-\frac{2}{3}$ $\frac{1}{3}$

Q15

Find the gradient of the straight line joining A(-3,4) and B(5,2).

- -4 4 $-\frac{1}{4}$ $\frac{1}{4}$

Q16

Find the gradient and y-intercept of the line $2x - y + 7 = 0$.

gradient = 2

y-intercept = 7

Q17

Find the gradient and y-intercept of the line $3x + y - 4 = 0$.

gradient = -3

y-intercept = 4

Q18

Find the gradient and y-intercept of the line $5x - y - 3 = 0$.

gradient = 5

y-intercept = -3

Q19

M(4, 5) is the midpoint of the interval joining A(2, 3) and B(x, y). Find the coordinates of B.

B = (,)
(6, 7)

Q20

M(3, 3) is the midpoint of the interval joining A(-2, 6) and B(x, y). Find the coordinates of B.

B = (,)
(8, 0)

Q21

$M(4,3)$ is the midpoint of the interval joining $A(2,3)$ and $B(x,y)$. Find the coordinates of B .

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

$(6,3)$

Q22

Find the gradient of the interval joining $A(3,9)$ and $B(5,4)$.

$-\frac{5}{2}$ -3 -2 $-\frac{5}{3}$

Q23

Find the gradient of the interval joining $A(2,8)$ and $B(4,5)$.

$-\frac{5}{2}$ $-\frac{2}{3}$ -2 $-\frac{3}{2}$

Q24

Find the gradient of the interval joining $A(1,3)$ and $B(4,8)$.

$\frac{7}{3}$ $\frac{5}{3}$ $\frac{3}{5}$ $\frac{5}{2}$

Q25

The gradient of the straight line passing through $(1,-4)$ and $(-5,3)$ is

$-\frac{7}{6}$ $\frac{3}{2}$ $-\frac{2}{3}$ $\frac{6}{7}$

Q26

Find the gradient of the straight line joining $A(-3,1)$ and $B(-2,-1)$.

$\frac{2}{3}$ $-\frac{3}{2}$ -2 2

Q27

Find the gradient of the straight line joining $A(4,-6)$ and $B(-1,3)$.

$-\frac{9}{5}$ $\frac{5}{9}$ -5 $\frac{5}{4}$

Q28

Find the gradient of the straight line $y = 2 + \frac{x}{3}$.

$\frac{1}{2}$ $\frac{1}{3}$
 $-\frac{1}{2}$ $-\frac{1}{3}$

Q29

Find the gradient of the straight line $3x + 5y - 8 = 0$.

$\frac{8}{3}$ $-\frac{3}{8}$
 $-\frac{5}{3}$ $-\frac{3}{5}$

Q30

Find the equation of a straight line with a gradient of 0 and a y -intercept of -3 .

$y = -x - 3$ $y = -3x$
 $y = 3 - x$ $y = -3$