Year 9 Class 8 questions

Q1

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

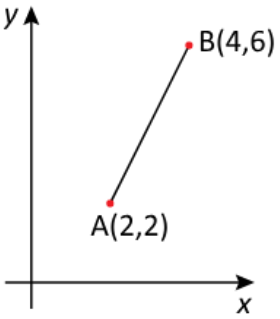
M = (☐ , ☐)

Q2

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

M = (☐ , ☐)

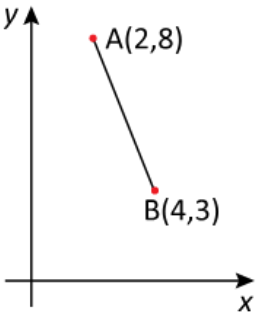
Q3



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 = (☐ , ☐)

Q8

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

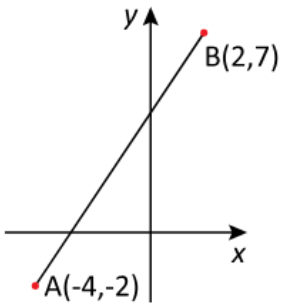
M = (☐ , ☐)

Q9

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

M = (☐ , ☐)

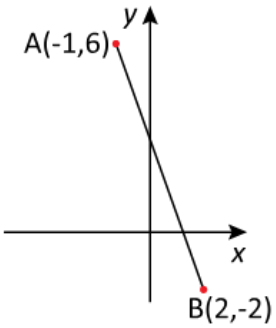
Q10



Find the gradient of the interval AB.

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

Q11

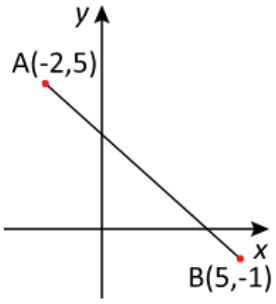


Find the gradient of the interval AB.

○ $-\frac{7}{3}$ ○ $-\frac{8}{3}$

○ -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 = ☐

y-intercept = ☐

Q17

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

gradient = ☐

y-intercept = ☐

Q18

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

gradient = ☐

y-intercept = ☐

Q19

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

B = (☐ , ☐)

Q20

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

B = (☐ , ☐)

Q21

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

B = (☐ , ☐)

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.

○ $y = -x - 3$ ○ $y = -3x$

○ $y = 3 - x$ ○ $y = -3$