

MM Unit 1 Linear Coordinate Geometry Mini Task 2

Name: _____

Give your answers correct to 2 decimal places where appropriate.

Technology Active

Time: 25 Minutes

Marks = 18

1. Find the equation of the straight line which passes through the point (1, 7) and is:
- a) perpendicular to the line with equation: $4x - 2y - 3 = 0$

- b) makes the angle of 120° with the positive direction of the x -axis.

(4 marks)

2. Find the angle of inclination (to the nearest minute) of a straight line
 $2y - 3x = 0$

(2 marks)

3. If the gradient joining the points (2, a) and (-1, 5) equals 4, find the value of a .

(2 marks)

4. Calculate the perimeter of the triangle which has vertices $(-3, -4)$, $(1, 5)$ and $(7, -2)$.

(2 marks)

5. Find the equation of the perpendicular bisector of the line segment joining the points $(-3, -1)$ and $(6, 3)$.

(4 marks)

Multiple Choice

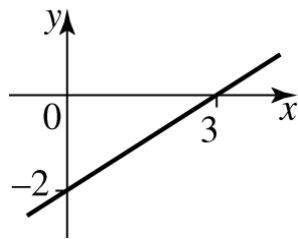
6. If two lines $2x - y + 3 = 0$ and $ax + 3y - 1 = 0$ are parallel then a is equal to:

- A. -6 B. -2 C. 2 D. 3 E. 6

7. M is the midpoint of XY . The coordinates of M and Y are $(7, -3)$ and $(5, 4)$ respectively. The coordinates of X are:

- A. $(6, \frac{1}{2})$ B. $(4, -14)$ C. $(1, 10)$ D. $(9, -10)$ E. $(6, -5)$

8.



The equation of the graph above is

- A $2x + 3y - 6 = 0$
B $2x - 3y + 6 = 0$
C $3x + 2y + 6 = 0$
D $2x - 3y - 6 = 0$
E $3x - 2y - 6 = 0$

9. The points $(-1, 3)$, $(2, 7)$ and $(5, y)$ are collinear. The value of y is:

- A 10
B 11
C 15
D 21
E 23

END MINI TASK 2