

**Coordinate geometry – 2023 O Level Math D 4024****1. Nov/2023/Paper\_4024/21/No.3**

(a) The equation of line  $L$  is  $4y = x - 5$ .

(i) Find the gradient of line  $L$ .

..... [1]

(ii) Find the coordinates of the point where line  $L$  crosses the  $y$ -axis.

( ..... , ..... ) [1]

(b)  $A$  is the point  $(4, 5)$  and  $B$  is the point  $(-2, 8)$ .

(i) Find the length of line  $AB$ .

..... [2]

- (ii) Find the equation of line  $AB$ .  
Give your answer in the form  $y = mx + c$ .

$$y = \dots\dots\dots [3]$$

**2. Nov/2023/Paper\_4024/22/No.7(b)**

- (b) The equation of line  $P$  is  $y = 4x - 3$  .  
Line  $L$  is perpendicular to line  $P$ .  
Line  $L$  passes through the point  $(6, 4)$ .

Find the coordinates of the point where line  $L$  crosses the  $x$ -axis.

( ..... , ..... ) [4]

**3. June/2023/Paper\_4024/11/No.26**

$A$  is the point  $(-2, 3)$  and  $B$  is the point  $(4, 7)$ .

(a) Find the coordinates of the midpoint of  $AB$ .

( ..... , ..... ) [1]

(b) Line  $l$  is the locus of points that are equidistant from  $A$  and  $B$ .

Find the equation of line  $l$ .

..... [4]

**4. June/2023/Paper\_4024/12/No.24**

$A$  is the point  $(3, 11)$  and  $B$  is the point  $(-5, -5)$ .

The equation of line  $L$  is  $2y + x = 5$ .

Show that line  $L$  is the perpendicular bisector of  $AB$ .

[5]