

## **MATHS**

# BOOKS - INDEPENDENTLY PUBLISHED MATHS (ENGLISH)

## **LINEAR FUNCTIONS**

**Examples** 

**1.** Describe the line 3x = 12.



**2.** Describe the line x - 3y = 6.



**Watch Video Solution** 

**3.** Write an equation of the line containing (6,-5) and having slope  $\frac{3}{4}$ .



**4.** Write an equation of the line containing (1,-3) and (-4,-2).



Watch Video Solution

**5.** The equation of line  $l_1$  is y=2x+3, and the equation of line  $l_2$  is y=2x-5.



**6.** The equation of line  $l_1$  is  $y=rac{5}{2}x-4$ , and the equation of line  $l_2$  is  $y=-rac{2}{5}x+9$ .



**Watch Video Solution** 

7. Write an equation of the line containing (1,7) and parallel to the line 3x+5y=18.



**8.** Write an equation of the line containing (-3,2) and perpendicular to y=4x-5.



**Watch Video Solution** 

**9.** Given point (2,-3) and point (-5,4), find the length of  $\overline{PQ}$  and the coordinates of the midpoint, M.



**1.** The slope of the line through points A(3,-2) and B(-2,-3) is

$$A. - 5$$

$$\mathsf{B.}-\frac{1}{5}$$

c. 
$$\frac{1}{5}$$

D. 1

**Answer: C** 



**2.** The slope of line 8x + 12y + 5 = 0 is

$$\mathsf{A.}-\frac{3}{2}$$

$$\mathsf{B.}-\frac{2}{3}$$

$$\mathsf{C.}\;\frac{2}{3}$$

D. 2

**Answer: B** 



3. The slope of the line perpendicular to line

$$3x - 5y + 8 = 0$$
 is

$$\mathsf{A.}-\frac{5}{3}$$

$$\mathsf{B.}-rac{3}{5}$$

$$\mathsf{C.}\,\frac{3}{5}$$

D. 
$$\frac{5}{3}$$

**Answer: A** 



**4.** The y-intercept of the line through the two points whose coordinates are (5,-2) and (1,3) is

$$\mathsf{A.}-\frac{5}{4}$$

$$\mathsf{B.}\;\frac{5}{4}$$

c. 
$$\frac{17}{4}$$

D. 7

### **Answer: C**



**5.** The equation of the perpendicular bisector of the segment joining the points whose coordinates are (1,4) and (-2,3) is

A. 
$$3x - 2y + 5 = 0$$

B. 
$$x - 3y + 2 = 0$$

C. 
$$3x + y - 2 = 0$$

D. 
$$x = 3y + 11 = 0$$

#### **Answer: C**



**6.** The length of the segment joining the points with coordinates (-2,4) and (3,-5) is

- A. 2.8
- B. 3.7
- C. 10
- D. 10.3

**Answer: D** 



**7.** The slope of the line parallel to the line whose equation is 2x+3y=8 is

$$A.-2$$

$$\mathsf{B.}-\frac{3}{2}$$

$$\mathsf{C.}-rac{2}{3}$$

D. 
$$\frac{2}{3}$$

**Answer: C** 

