

# 3 Lecture - MTH101

## Important Mcqs

1. What is the equation of the vertical line passing through the point (-3,5)?
- a)  $x = -3$
  - b)  $y = -3$
  - c)  $x = 5$
  - d)  $y = 5$

**Solution: a)  $x = -3$**

2. What are the coordinates of the origin on a coordinate plane?
- a) (1,1)
  - b) (-1,-1)
  - c) (0,0)
  - d) (2,2)

**Solution: c) (0,0)**

3. What is the slope of the line passing through the points (3,5) and (1,2)?
- a)  $3/2$
  - b)  $-3/2$
  - c)  $2/3$
  - d)  $-2/3$

**Solution: b)  $-3/2$**

4. Which quadrant contains the point (-4,-2)?
- a) First
  - b) Second
  - c) Third
  - d) Fourth

**Solution: c) Third**

5. What is the distance between points (2,5) and (-3,1)?
- a) 2
  - b) 5
  - c)  $\sqrt{26}$
  - d)  $\sqrt{29}$

**Solution: d)  $\sqrt{29}$**

6. What is the slope of the line perpendicular to the line  $y = 3x - 2$ ?
- a)  $3/2$
  - b)  $-3/2$

- c)  $-1/3$
- d)  $1/3$

**Solution: c)  $-1/3$**

7. Which of the following is an equation of a vertical line?

- a)  $y = 2x + 3$
- b)  $x = 4$
- c)  $y = -x + 1$
- d)  $x + y = 7$

**Solution: b)  $x = 4$**

8. What is the equation of the line passing through the points (2,-3) and (4,5)?

- a)  $y = -2x + 1$
- b)  $y = 2x - 7$
- c)  $y = -4x - 11$
- d)  $y = 4x - 11$

**Solution: d)  $y = 4x - 11$**

9. What is the slope-intercept form of the equation of the line passing through the point (2,4) with a slope of -2?

- a)  $y = -2x - 4$
- b)  $y = -2x + 8$
- c)  $y = 2x - 4$
- d)  $y = 2x + 4$

**Solution: a)  $y = -2x + 8$**

10. What is the equation of the line passing through the points (-1,3) and (5,-1)?

- a)  $y = -x + 2$
- b)  $y = x + 2$
- c)  $y = -x - 2$
- d)  $y = x - 2$

**Solution: c)  $y = -x + 2$**