

4 Lecture - MTH101

Important Mcqs

1. What is the slope of a horizontal line?

- a) Positive
- b) Negative
- c) Zero
- d) Undefined

Solution: c) Zero

2. What is the equation of a line with a slope of 2 and a y-intercept of 3?

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

Solution: a) $y = 2x + 3$

3. What is the y-intercept of a line with an equation of $y = -5x + 7$?

- a) -5
- b) 5
- c) 7
- d) -7

Solution: c) 7

4. What is the slope of a line that passes through points (3, 5) and (8, 11)?

- a) 3
- b) 2
- c) 1
- d) 6

Solution: b) 2

5. What is the slope of a vertical line?

- a) Positive
- b) Negative
- c) Zero
- d) Undefined

Solution: d) Undefined

6. What is the equation of a line that passes through the points (-2, 4) and (4, -2)?

a) $y = x + 2$

b) $y = -x - 2$

c) $y = -x + 2$

d) $y = x - 2$

Solution: b) $y = -x - 2$

7. What is the y-intercept of a line with an equation of $y = 2x - 6$?

a) -2

b) 2

c) -6

d) 6

Solution: c) -6

8. What is the slope of a line that is parallel to the line $y = 4x + 2$?

a) 4

b) -4

c) $1/4$

d) $-1/4$

Solution: a) 4

9. What is the equation of a line that is perpendicular to the line $y = -3x + 5$ and passes through the point (2, 4)?

a) $y = -1/3x + 10/3$

b) $y = -3x + 10$

c) $y = 1/3x + 2/3$

d) $y = 3x - 2$

Solution: a) $y = -1/3x + 10/3$

10. What is the slope of a line that passes through the points (0, 4) and (4, 0)?

a) 4

b) -4

c) 1

d) -1

Solution: b) -4