## 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 $\mathbf{2}$ and a $y$-intercept of $\mathbf{3}$ ?
a) $y=2 x+3$
b) $y=3 x+2$
c) $y=2 x-3$
d) $y=-2 x+3$

Solution: a) $y=2 x+3$
3. What is the $y$-intercept of a line with an equation of $y=-5 x+7$ ?
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 $y=2 x-6$ ?
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 $y=4 x+2$ ?
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 $y=-3 x+5$ and passes through the point $(2,4)$ ?
a) $y=-1 / 3 x+10 / 3$
b) $y=-3 x+10$
c) $y=1 / 3 x+2 / 3$
d) $y=3 x-2$

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

