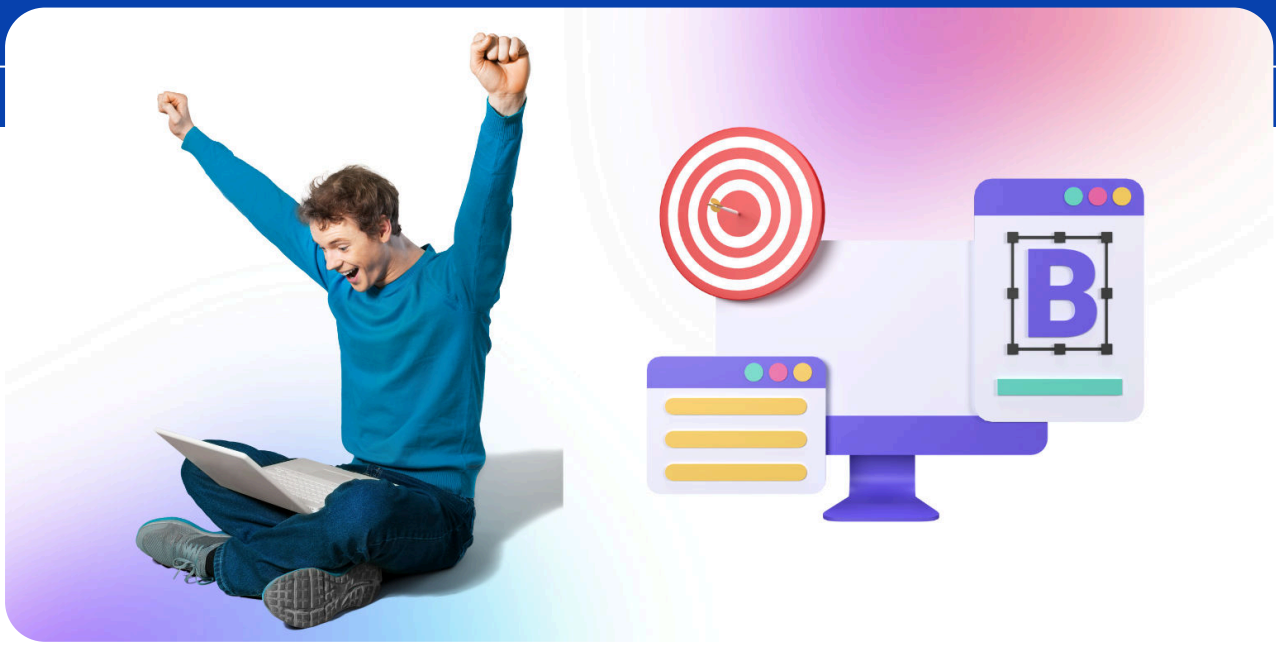
Edulyte

SLOPE FORMULA

The slope of a line shows how steep it is and the exact way it tilts. You figure out the slope using two points on the line. To get the right slope, you do a little math: the change in Y divided by the change in X. By checking the line's tilt from left to right, you can spot the slope. To do this, you look at the ratio of rising vs running between the two points on the line. Another name for slope is gradient. It's a special type of number that tells us the direction and how steep the line is.

Read more



Q1: How does the slope formula change when the line is vertical?

A: (y2 - y1) / (x2 - x1)
B: (x2 - x1) / (y2 - y1)
C: Undefined
D: Zero

Q2: What is the formula for calculating slope-intercept form (y = mx + b)?

A: y = (x2 - x1) / (y2 - y1)
B: y = mx + b
C: y = (y2 - y1) / (x2 - x1)
D: y = x + m

Q3: What is the significance of the y-intercept (b) in the slope-intercept form?

A: It represents the slope of the line.
B: It is the point where the line intersects the y-axis.
C: It indicates the line's direction.
D: It is irrelevant in slope calculations.

Q4: What is the Slope of the X-Axis?

A: 1
B: 2
C: -1
D: 0

Q5: Using the Slope Formula determines the Slope whose coordinates are (2,9) and (4,1)

A: 2
B: 4
C: -4
D: -2

Q6: Using the Slope Formula, determine the Slope whose Y-Axis Angle is 30°

A: √3
B: 3
C: -3
D: None of these

Q7: If the Slope of a line is 6 with the Coordinates of (b,7) and (8, -5), then find b

A: 12
B: 10
C: 15
D: 20

Q8: In What Areas Does the Usage of Slope Formula Happen?

A: Engineering
B: Trigonometry
C: Ramp Building
D: All of these

Q9: Using the Slope Formula determines the Slope whose coordinates are (4,8) and (2,10)

A: 2
B: 4
C: 6
D: 8

Q10: Using the Slope Formula determines the Slope whose coordinates are (3,5) and (6,12)

A: 3
B: 4
C: -3
D: -4

Answers

Q1: A - (y2 - y1) / (x2 - x1)

Q2: B - y = mx + b

Q3: A - It represents the slope of the line.

Q4: D - 0

Q5: C - -4

Q6: A - √3

Q7: B - 10

Q8: D - All of these

Q9: A - 2

Q10: C - -3