Name : _____ Score : _____

# Equation of a Line

Slope Intercept: L1S5

## Part - A

Find the equation of the line passing through the given points. Express the equation in slope-intercept form.

1) (9, –7) and (–8, –4)

2) (–3, 8) and (0, 1)

3) (–6, –2) and (3, 1)

4) (4, –3) and (–6, 9)

5) (–8, 5) and (0, –3)

7) (–7, –4) and (–1, –2



1) Find the equation of the tangent that cuts the x-axis at (–7, 0) and touches the circle at the point (8, –9).

_____

2) A line cuts the x-axis at x = 8 and passes through the point (6, 4). Find the equation of the line.

_____

Name : _____ **Answer key** Score : _____

# Equation of a Line

Slope Intercept: L1S5

## Part - A

Find the equation of the line passing through the given points. Express the equation in slope-intercept form.

1) (9, –7) and (–8, –4)

$y = -\frac{3}{17}x - \frac{92}{17}$

2) (–3, 8) and (0, 1)

$y = -\frac{7}{3}x + 1$

3) (–6, –2) and (3, 1)

$y = \frac{1}{3}x$

4) (4, –3) and (–6, 9)

5) (–8, 5) and (0, –3)

$y = -x - 3$

7) (–7, –4) and (–1, –2

$y = \frac{1}{3}x - \frac{5}{3}$



1) Find the equation of the tangent that cuts the x-axis at (–7, 0) and touches the circle at the point (8, –9).

$y = -\frac{3}{5}x - \frac{21}{5}$

2) A line cuts the x-axis at x = 8 and passes through the point (6, 4). Find the equation of the line.

$y = -2x + 16$