

## Equation of a Line

Slope Intercept: L2S4

### Part - A

Write the equation of the line whose slope and the point through which it passes are given. Express the equation in slope-intercept form.

1)  $\left(\frac{3}{2}, -9\right)$  and slope  $m = 18$

2)  $\left(-\frac{8}{7}, 1\right)$  and slope  $m = \frac{1}{6}$

3)  $\left(\frac{7}{4}, \frac{9}{2}\right)$  and slope

slope  $m = 4$ 

5)  $\left(-\frac{1}{5}, -\frac{6}{7}\right)$  and slope

slope  $m = 0$ 

1) If the slope of the line is  $\frac{1}{2}$  and it passes through the point  $(-2, 3)$ , find the equation of the line.

Find the equation of the line.

2) Find the equation of the line  $q$  that passes through the point  $\left(3, -\frac{9}{4}\right)$  and whose slope is 6.

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**Equation of a Line**

Slope Intercept: L2S4

**Part - A**

Write the equation of the line whose slope and the point through which it passes are given. Express the equation in slope-intercept form.

1)  $\left(\frac{3}{2}, -9\right)$  and slope  $m = 18$

$y = 18x - 36$

2)  $\left(-\frac{8}{7}, 1\right)$  and slope  $m = \frac{1}{6}$

$y = \frac{1}{6}x + \frac{25}{21}$

3)  $\left(\frac{7}{4}, \frac{9}{2}\right)$  and slope  $m = 4$

$y = -5x + \frac{53}{4}$

5)  $\left(-\frac{1}{5}, -\frac{6}{7}\right)$  and slope  $m = 0$

$y = -3x - \frac{51}{35}$

1) If the slope of the line is  $-\frac{2}{9}$  and the equation of the line is  $y = -2x + \frac{20}{9}$

$y = -2x + \frac{20}{9}$

2) Find the equation of the line  $q$  that passes through the point  $\left(3, -\frac{9}{4}\right)$  and whose slope is 6.

$y = 6x - \frac{81}{4}$

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