

1. Evaluate  $2y - 3x$  for  $x = -5$  and  $y = 6$ .

a)  $-28$

b)  $27$

c)  $-3$

d)  $-46$

2. Simplify:  $\left| -\frac{1}{2} - \frac{1}{3} \right|$ .

a)  $-\frac{5}{6}$

b)  $-\frac{1}{6}$

c)  $\frac{1}{6}$

d)  $\frac{5}{6}$

4. Simplify:  $2x - [5 - (x + 4)]$ .

a)  $3x - 9$

b)  $x - 9$

c)  $3x - 1$

d)  $-1$

5. Divide:  $\frac{3}{10} \div \left(-\frac{2}{5}\right)$ .

a)  $-\frac{25}{3}$

b)  $-\frac{4}{3}$

c)  $-\frac{3}{4}$

d)  $-\frac{3}{25}$

6. Multiply:  $-15(-2)(-8)$ .

a)  $-240$

b)  $-150$

c)  $-136$

d)  $-46$

7. Collect like terms:  $5a + 2 - 9a + 6$ .

- a)  $-4a + 12$       b)  $14a - 4$       c)  $-4a - 4$       d)  $-4a + 8$

8. Simplify:  $4[2(x - 9) - (x + 3)]$ .

- a)  $4x - 72$       b)  $4x - 84$       c)  $-4x + 84$       d)  $x - 21$

9. Simplify:  $(-2x^2y^{-1})^5$ .

- a)  $-32x^{10}y^{-5}$       b)  $-32x^7y^4$       c)  $-10x^2y^{-1}$       d)  $-2x^{10}y^{-1}$

## Q1: Multiply

$$\begin{aligned}(x^2 - 3x + 2)(2x - 1) &= 2x^3 - 6x^2 + 4x - x^2 + 3x - 2 \\ &= 2x^3 - 7x^2 + 7x - 2\end{aligned}$$

## Q2: Divide

$$\begin{aligned}\frac{2x-4}{x+1} \div \frac{x-2}{(x+1)^2} &= \frac{2x-4}{x+1} \times \frac{(x+1)^2}{x-2} \\ &= \frac{2(x-2)(x+1)^2}{(x+1)(x-2)} \\ &= 2(x+1)\end{aligned}$$

Q3: Solve

$$(x - 4)(x + 3) = 0$$

$$x = 4$$

*or*

$$x = -3$$

## Q4:Solve

$$x - \frac{5}{3} \geq 3x + \frac{1}{2}$$

$$x - 3x \geq \frac{1}{2} + \frac{5}{3}$$

$$-2x \geq \frac{3}{6} + \frac{10}{6}$$

$$-2x \geq \frac{13}{6}$$

$$x \leq \frac{13}{-12}$$

$$x \leq -\frac{13}{12}$$

Q5: Graph the line

$$y - 2x + 3 = 0$$