

# Adding and Subtracting Polynomials Bell Work

Simplify the following polynomials

1.  $3x + 2y + 4 + 5x - y + 3$

2.  $4a^2b + 2a - b + 3a + 6a^2b - 4$

3.  $5x + 3 - 6x + 5 + 4x - 9$

4.  $6x^2 + 4x - 9 + 2x - 3x + 2$

Perform the indicated operation

5. Find the sum of  $6x + 5$ ;  $3x + 2$  and  $5x^2 - 3$ .

6. Subtract  $3x + 2y + 4$  from the sum of  $6x + 5$  and  $4y - 3$ .

Remove the grouping symbol of the following polynomials

7.  $-\{2x - [4x - (3x + 2)] - 5\}$

8.  $-[2x - (3x + 2)] - [2x - (9x + 16)]$

9.  $-\{4x - 6 - [-6x + 5 - (3x - 2)]\}$

10.  $-[-2 + 3x - (2x - 1)] - (3x + 2)$

# Adding and Subtracting Polynomials Bell Work

Answer:

Simplify the following polynomials

1.  $3x + 2y + 4 + 5x - y + 3$

Answer:

$8x + y + 7$

3.  $5x + 3 - 6x + 5 + 4x - 9$

Answer:

$3x - 1$

Perform the indicated operation

5. Find the sum of  $6x + 5$ ;  $3x + 2$  and  $5x^2 - 3$ .

$$\begin{array}{r}
 5x^2 \quad - 3 \\
 6x + 5 \\
 (+) \quad 3x + 2 \\
 \hline
 5x^2 + 9x + 4
 \end{array}$$

2.  $4a^2b + 2a - b + 3a + 6a^2b - 4$

Answer:

$10a^2b + 5a - b - 4$

4.  $6x^2 + 4x - 9 + 2x - 3x + 2$

Answer:

$6x^2 + 3x - 7$

6. Subtract  $3x + 2y + 4$  from the sum of  $6x + 5$  and  $4y - 3$ .

$$\begin{array}{r}
 6x \quad + 5 \\
 + \quad 4y - 3 \\
 \hline
 6x + 4y + 2 \\
 (-) \quad 3x + 2y + 4 \\
 \hline
 3x + 2y - 2
 \end{array}$$

Remove the grouping symbol of the following polynomials

7.  $-\{2x - [4x - (3x + 2)] - 5\}$

$-\{2x - [4x - 3x - 2] - 5\}$

$-\{2x - [x - 2] - 5\}$

$-\{2x - x + 2 - 5\}$

$-\{x - 3\}$

$-x + 3$

9.  $-\{4x - 6 - [-6x + 5 - (3x - 2)]\}$

$-\{4x - 6 - [-6x + 5 - 3x + 2]\}$

$-\{4x - 6 - [-9x + 7]\}$

$-\{4x - 6 + 9x - 7\}$

$-\{13x - 13\}$

$-13x + 13$

8.  $-[2x - (3x + 2)] - [2x - (9x + 16)]$

$-[2x - 3x - 2] - [2x - 9x - 16]$

$-[-x - 2] - [-7x - 16]$

$x + 2 + 7x + 16$

$8x + 18$

10.  $-[-2 + 3x - (2x - 1)] - (3x + 2)$

$-[-2 + 3x - 2x + 1] - (3x + 2)$

$-[-1 + x] - (3x + 2)$

$1 - x - 3x - 2$

$-4x - 1$