Algebraic Expressions Ex 7.4 Q1

Answer :

We have

$2x + (5x - 3y)$

Since the '+' sign precedes the parentheses, we have to retain the sign of each term in the parentheses when we remove them.

$= 2x + 5x - 3y$

$= 7x - 3y$

Algebraic Expressions Ex 7.4 Q2

Answer :

We have

$3x - (y - 2x)$

Since the '-' sign precedes the parentheses, we have to change the sign of each term in the parentheses when we remove them. Therefore, we have

$3x - y + 2x$

$= 5x - y$

Algebraic Expressions Ex 7.4 Q3

Answer :

We have

$5a - (3b - 2a + 4c)$

Since the '-' sign precedes the parentheses, we have to change the sign of each term in the parentheses when we remove them.

$= 5a - 3b + 2a - 4c$

$= 7a - 3b - 4c$

Algebraic Expressions Ex 7.4 Q4

Answer :

We have

$-2(x^2 - y^2 + xy) - 3(x^2 + y^2 - xy)$

Since the '-' sign precedes the parentheses, we have to change the sign of each term in the parentheses when we remove them.

$= -2x^2 + 2y^2 - 2xy - 3x^2 - 3y^2 + 3xy$

$= -2x^2 - 3x^2 + 2y^2 - 3y^2 - 2xy + 3xy$

$= -5x^2 - y^2 + xy$

Algebraic Expressions Ex 7.4 Q5

Answer :

We have

$3x + 2y - \{x - (2y - 3)\}$

First, we have to remove the small brackets (or parentheses): ( ). Then, we have to remove the curly brackets (or braces): { }.

Therefore,

$= 3x + 2y - \{x - 2y + 3\}$

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

$= 2x + 4y - 3$

Algebraic Expressions Ex 7.4 Q6

Answer :

We have

$5a - \{3a - (2 - a) + 4\}$

First, we have to remove the small brackets (or parentheses): ( ). Then, we have to remove the curly brackets (or braces): { }.

Therefore,

$= 5a - \{3a - 2 + a + 4\}$

$= 5a - 3a + 2 - a - 4$

$= 5a - 4a - 2$

$= a - 2$

********** END **********