Algebraic Expressions Ex 7.4 Q7

Answer :

First we have to remove the parentheses, or small brackets, ( ), then the curly brackets, { }, and then the square brackets [ ].
Therefore, we have
a - [b - {a - (b - 1) + 3a)]
= a - [b - {a - b + 1 + 3a}]
= a - [b - {4a - b + 1}]
= a - [b - 4a + b - 1]
= a - [2b - 4a - 1]
= a - 2b + 4a + 1
= 5a - 2b + 1

Algebraic Expressions Ex 7.4 Q8

Answer :

First we have to remove the small brackets, or parentheses, ( ), then the curly brackets, { }, and then the square brackets, [ ].
Therefore, we have
a - [2b - {3a - (2b - 3c)}]
= a - [2b - {3a - 2b + 3c}]
= a - [2b - 3a + 2b - 3c]
= a - [4b - 3a - 3c]
= a - 4b + 3a + 3c
= 4a - 4b + 3c

Algebraic Expressions Ex 7.4 Q9

Answer :

First we have to remove the small brackets, or parentheses, ( ), then the curly brackets, { }, and then the square brackets, [ ].
Therefore, we have
- x + [5y - {2x - (3y - 5x)}]
= - x + [5y - {2x - 3y + 5x}]
= - x + [5y - {7x - 3y}]
= - x + [5y - 7x + 3y]
= - x + [8y - 7x]
= - x + 8y - 7x
= - 8x + 8y

Algebraic Expressions Ex 7.4 Q10

Answer :

First we have to remove the small brackets, or parentheses, ( ), then the curly brackets, { }, and then the square brackets, [ ].
Therefore, we have
2a - [4b - {4a - 3(2a - b)}]
= 2a - [4b - {4a - 6a + 3b}]
= 2a - [4b - {- 2a + 3b}]
= 2a - [4b + 2a - 3b]
= 2a - [b + 2a]
= 2a - b - 2a
= - b

Algebraic Expressions Ex 7.4 Q11

Answer :

First we have to remove the small brackets, or parentheses, ( ), then the curly brackets,{ }, and then the square brackets, [ ].
Therefore, we have
- a - [a + {a + b - 2a - (a - 2b)} - b]
= - a - [a + {a + b - 2a - a + 2b} - b]
= - a - [a + {- 2a + 3b} - b]
= - a - [a - 2a + 3b - b]
= - a - [- a + 2b]
= - a + a - 2b
= - 2b

Algebraic Expressions Ex 7.4 Q12

Answer :

First we have to remove the small brackets, or parentheses, ( ), then the curly brackets, { }, and then the square brackets, [ ].

Therefore, we have

$2x - 3y - [3x - 2y - \{x - z - (x - 2y)\}]$

$= 2x - 3y - [3x - 2y - \{x - z - x + 2y\}]$

$= 2x - 3y - [3x - 2y - \{- z + 2y\}]$

$= 2x - 3y - [3x - 2y + z - 2y]$

$= 2x - 3y - [3x - 4y + z]$

$= 2x - 3y - 3x + 4y - z$

$= - x + y - z$

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