

Algebraic Expressions Ex 7.4 Q7

Answer:

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First we have to remove the parentheses, or small brackets, ( ), then the curly brackets, { }, and then the square brackets [ ]. Therefore, we have a \cdot [b \cdot \{a \cdot (b \cdot 1) + 3a\}] \\ = a \cdot [b \cdot \{a \cdot b + 1 + 3a\}] \\ = a \cdot [b \cdot \{4a \cdot b + 1\}] \\ = a \cdot [b \cdot 4a + b \cdot 1] \\ = a \cdot [2b \cdot 4a + 1] \\ = a \cdot 2b + 4a + 1 \\ = 5a \cdot 2b + 1
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Algebraic Expressions Ex 7.4 Q8

Answer:

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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
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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 $-x + [5y - \{2x - (3y - 5x)\}]$ = $-x + [5y - \{2x - 3y + 5x\}]$

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-x + [5y - \{2x - (3y - 5x)\}]
= -x + [5y - \{2x - 3y + 5x\}]
= -x + [5y - \{7x - 3y\}]
= -x + [5y - 7x + 3y]
= -x + [8y - 7x]
= -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, [].

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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
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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, $\{ \}$.

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

 $2x - 3y - [3x - 2y - \{x - z - (x - 2y)\}]$ $= 2x - 3y - [3x - 2y - \{x - z - x + 2y\}]$ $= 2x - 3y - [3x - 2y - \{-z + 2y\}]$ = 2x - 3y - [3x - 2y + z - 2y] = 2x - 3y - [3x - 4y + z] = 2x - 3y - [3x - 4y + z] = 2x - 3y - 3x + 4y - z = -x + y - z

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