

Algebraic Expressions Ex 7.4 Q13

Answer:

```
First we have to remove the small brackets, or parentheses, ( ), then the curly brackets, { }, and then the square brackets, [ ]. Therefore, we have 5+[x-\{2y-(6x+y-4)+2x\}-\{x-(y-2)\}]\\ =5+[x-\{2y-6x-y+4+2x\}-\{x-y+2\}]\\ =5+[x-\{y-4x+4\}-\{x-y+2\}]\\ =5+[x-y+4x-4-x+y-2]\\ =5+[4x-6]\\ =5+4x-6\\ =4x-1
```

Algebraic Expressions Ex 7.4 Q14

Answer

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

Algebraic Expressions Ex 7.4 Q15

Answer

```
First we have to remove the small brackets, or parentheses, ( ), then the curly brackets, { }, and then the square brackets, [ ].  
Therefore, we have 20 - [5xy + 3\{x^2 - (xy - y) - (x - y)\}] \\ = 20 - [5xy + 3\{x^2 - xy + y - x + y\}] \\ = 20 - [5xy + 3\{x^2 - xy + 2y - x\}] \\ = 20 - [5xy + 3x^2 - 3xy + 6y - 3x] \\ = 20 - [2xy + 3x^2 + 6y - 3x] \\ = 20 - 2xy - 3x^2 - 6y + 3x \\ = 3x^2 - 2xy - 6y + 3x + 20
```

Algebraic Expressions Ex 7.4 Q16

Answer:

```
First we have to remove the small brackets, or parentheses, ( ), then the curly brackets, { }, and then the square brackets, [ ]. Therefore, we have 85 - [12x - 7(8x - 3) - 2\{10x - 5(2 - 4x)\}] \\ = 85 - [12x - 56x + 21 - 2\{10x - 10 + 20x\}] \\ = 85 - [12x - 56x + 21 - 2\{30x - 10\}] \\ = 85 - [12x - 56x + 21 - 60x + 20] \\ = 85 - [12x - 116x + 41] \\ = 85 - [-104x + 41] \\ = 85 + 104x - 41 \\ = 44 + 104x
```

Algebraic Expressions Ex 7.4 Q17

Answer

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

Therefore, we have

xy - [yz - zx - {yx - (3y - xz) - (xy - zy)}]

= xy - [yz - zx - {yx - 3y + xz - xy + zy}]

= xy - [yz - zx - {-3y + xz - xy + zy}]

= xy - [yz - zx + 3y - xz - zy]

= xy - [-zx + 3y - xz]

= xy - [-zx + 3y]

= xy + 2xz - 3y
```

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