

Substituting Values into Algebraic Expressions

Example 1: Calculate $3m + 6$ if you are given that $m = 2$

Answer: You have to “substitute” or “replace” the variable “m” with given value for “m”, which in this case is 2.

$$\begin{aligned} & 3m + 6 \\ = & 3(2) + 6 \\ = & 6 + 6 \\ = & 12 \end{aligned}$$

MAKE SURE YOU
SHOW YOUR WORK
LIKE I HAVE!!!

NOTE: You must follow BEDMAS when calculating the value:

Example 2: Calculate $3x + 8$ if you are given $x = -2$

$$\begin{aligned} \text{Answer: } & 3x + 8 \quad \text{if } x = -2 \\ & 3(-2) + 8 \\ & = 3(-2) + 8 \\ & = -6 + 8 \\ & = 2 \end{aligned}$$

Now try a few of these on your own. Remember to follow your order of operations. (BEDMAS)

Calculate the following:

$$\begin{aligned}
 \text{a) } & 12 - 2p \quad \text{when } p = 2 \\
 & = 12 - 2(2) \quad \text{Follow B \& D M A S} \\
 & = 12 - 4 \quad \leftarrow \text{evaluate}
 \end{aligned}$$

$$\begin{aligned}
 \text{b) } & 9 + 2r - 6 \quad \text{when } r = 4 \\
 & = 9 + 2(4) - 6 \quad \text{B A D M A S} \\
 & = 9 + 8 - 6 \\
 & = 17 - 6 \\
 & = 11
 \end{aligned}$$

$$\begin{aligned}
 \text{c) } & a + 6b \quad \text{when } a = 2 \quad b = 3 \\
 & = (2) + 6(3) \\
 & = (2) + 18 \\
 & = 20
 \end{aligned}$$

Complete the input/output chart Show work
Table of values

$$3n - 1$$

$$\begin{array}{l} 3n - 1 \\ 3(1) - 1 \\ \hline 3 - 1 \\ 2 \end{array}$$

n	output
0	-1
1	2
2	
3	
4	

$$\begin{array}{l} 3n - 1 \\ 3(0) - 1 \\ 0 - 1 \\ -1 \end{array}$$

Homework Worksheet



Attachments

Sub the x value into expression.pdf