

Do Now

Using Order of Operations, Solve the following expression

$$11 - (2 - (-3))^2$$

$$11 - (5)^2$$

$$11 - 25$$

$$-14$$

Sep 9-5:29 PM

Homework Answers

1) 26

2) 38

3) -15

4) 32

Sep 9-6:49 PM

Vocabulary

- **Constant**- a number with no coefficient attached
- **Coefficient**- the numerical factor in a variable term
- **Variable**- letter (x, y, z, etc.) that represents a number
- **Term**- A single number or variable or both combined
- **Expression**- math phrase that may include numbers, variables, and operations

4, -6
4x, 3x²
a, b

3x² + 2x - 4

Sep 9-6:57 PM

Now Let's Put it all Together!!

$$7x^2 - 12x + 4$$

Terms: $7x^2$, $-12x$, 4

Coefficients: 7, 12

Constants: 4

Sep 9-7:12 PM

Now Try on your Own

Identify the Terms of each expression and the Coefficient of each term

1) $7x + 8y$

Terms $\rightarrow 7x, 8y$
 Coef $\rightarrow 7, 8$

2) $3b^2 - 6t$

Term $\rightarrow 3b^2, -6t$
 Coef $\rightarrow 3, -6$

Sep 10-10:21 AM

Substituting in for Variables

If $a = 3$, then 3 may be replaced in for "a" in any expression

MAKE SURE TO FOLLOW ORDER OF OPERATIONS

Evaluate: $ab + c^2$

when $\underline{a = 2}$, $\underline{b = 3}$, and $\underline{c = 5}$

$$(2)(3) + (5)^2$$

$$(2)(3) + 25$$

$$6 + 25$$

$$(31)$$

Sep 10-10:28 AM

MAKE SURE TO FOLLOW ORDER OF OPERATIONSEvaluate: $3x^2 - 5x$ when $x = -3$

$$\begin{aligned}
 &3(-3)^2 - 5(-3) \\
 &3(9) - 5(-3) \\
 &27 - (-15) \\
 &27 + 15 \\
 &42
 \end{aligned}$$

Sep 10-10:36 AM

MAKE SURE TO FOLLOW ORDER OF OPERATIONSEvaluate: $a^2b - b^2$ when $a = 3$ and $b = -5$

$$\begin{aligned}
 &(3)^2(-5) - (-5)^2 \\
 &(9)(-5) - 25 \\
 &-45 - 25 \\
 &-45 + (-25) \\
 &-70
 \end{aligned}$$

Sep 10-10:44 AM

MAKE SURE TO FOLLOW ORDER OF OPERATIONS

Evaluate: $2(n + m)^2 + k$

When $n= 5$, $m= -2$, and $k=4$

$$2(n+m)^2 + k$$

$$2(5+(-2))^2 + 4$$

$$2(3)^2 + 4$$

$$2(9) + 4$$

$$(22)$$

Sep 10-10:41 AM