Writing Expressions

Objective: write verbal statements in algebraic form

Agenda

Warm-Up: See left

Notes: Writing Expressions

Exit Ticket: Vocabulary

Homework: None!

Remember: You need your notebook tomorrow!
Calculator form due Thursday.
Syllabus & Contact Card due Friday.

Warm-Up

Try to fill in as much of the box at the top of your notes as you can!

Please turn in any contact cards, mathbooks, or calculator forms.

Write an algebraic expression for each verbal expression below:

Vocabulary:

Expression: A mathematical phrase that contains operations, numbers, and/or variables. It does not have any equal signs (=).

$+ - \times \div$

Variable: A value that changes and represents an unknown. It is represented by a letter.

Constant: A value that does not change, represented by a number

Algebraic Expression	Numerical expression
include numbers, variables, and operations	include only numbers and operations.
$4x + 2$	$4 + 2$

Math Talk!

Addition

add
sum
increased by
more   plus
together
combined
and

Subtraction

take away

subtract
decreased by
minus

Exponents
squared x^2

to the power of

Parenthesis

quantity

Division

ratio
quotient
half
shared

Multiplication

times   of

product
twice   multiple

IS MEANS EQUALS!!

"Turn Around Words"
less than
from

Write a verbal expression for each algebraic expression given below:

1. $\dfrac{x^3}{5}$ *exponent*

    A number cubed divided by 5

2. $\dfrac{1}{2}n + 4$

3. $4m - 5n$ *"less than"*

    5 times n less than 4 times m.

4. $3x^2 + 5y$

Write an algebraic expression for each verbal expression.   2nd - #4, 3rd - #6, 4th&5th #5

5. The measure of an angle is $(5x)^\circ$. What is the measure of that angle's complement?   *subtract*

    $90 - 5X$

> **Remember!**
> **Complementary Angles-**
> *9 2 angles that add 90°*
> **Supplementary Angles-**
> *8 add to 180°*

6. A square has a side length of s. What is it's perimeter?

7. Three plus the quotient of 7 and a number subtracted from two times the same number.

8. Chris wants to buy his girlfriend a charm bracelet for her birthday. The cost of the bracelet is $85, plus $15.25 for each charm. Write an expression to find the cost of the bracelet if Chris purchases c, charms.

9. Lara wants to buy a Rock Band game that is on sale for 35% off the regular price. The regular price of the game is p dollars. Which expression represents the sale price of the game?

    A. $p - 0.35p$ C. $p - 35p$
    B. $p + 0.35p$ D. $0.35p$

10. Shany earns $545.25 less than 2.5 times her brother's monthly salary. Write an expression for Shany's salary in terms of her brother's monthly salary.

Exit Ticket

Evaluating Expression

Agenda

Please have out your notebook. Turn in things!!
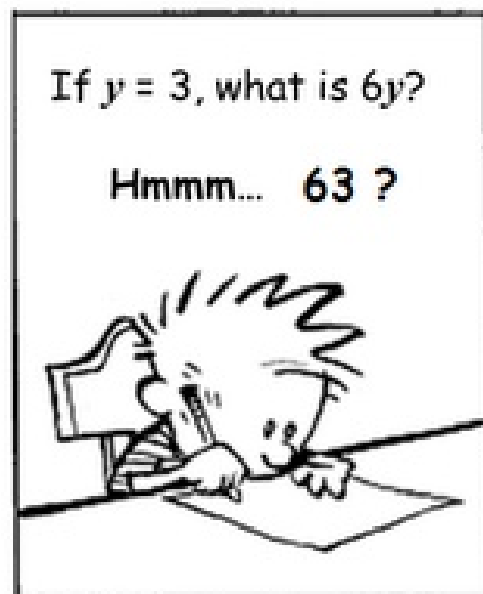
Warm-Up: See right

Notes: Evaluating Expressions

Homework: Begin worksheet

Remember:
Calculator form due TOMORROW.
Mathbook & Contact Card due Friday.

Warm-Up: On a notecard, explain why Calvin is wrong.

If $y = 3$, what is $6y$?

Hmmm...   63 ?

Write a verbal expression for each algebraic expression given below:

1. $\dfrac{x^3}{5}$

2. $\dfrac{1}{2}n + 4$

3. $4m - 5n$

4. $3x^2 + 5y$

Write an algebraic expression for each verbal expression. 2nd - #4, 3rd - #6, 4th&5th #5
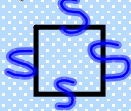
5. The measure of an angle is $(5x)°$. What is the measure of that angle's complement?

Remember!
Complementary Angles-
Supplementary Angles-

6. A square has a side length of s. What is it's perimeter?

$4s$

7. Three plus the quotient of 7 and a number subtracted from two times the same number.

$$2x - \left(3 + \dfrac{7}{x}\right)$$

8. Chris wants to buy his girlfriend a charm bracelet for her birthday. The cost of the bracelet is \$85, plus \$15.25 for each charm. Write an expression to find the cost of the bracelet if Chris purchases c, charms.

$$85 + 15.25c$$

9. Lara wants to buy a Rock Band game that is on sale for 35% off the regular price. The regular price of the game is p dollars. Which expression represents the sale price of the game?
    A. $p - 0.35p$ C. $p - 35p$
    B. $p + 0.35p$ D. $0.35p$

35%

$$\dfrac{35}{100} = .35$$

10. Shany earns \$545.25 less than 2.5 times her brother's monthly salary. Write an expression for Shany's salary in terms of her brother's monthly salary.

Equation: a mathematical statement that two expressions are equal

Evaluate: Look at something closely, determine the value of something.

Evaluate the following expressions for $a = \frac{3}{4}$, $b = 2.4$ and $c = 6$.

PEMDAS

11. $bc - 4a$	12. $\dfrac{0.5c + a}{a}$	13. $\dfrac{1}{3}ac - (b + c)$	14. $\left(-\dfrac{c}{.3} + b\right) - a$
$(2.4)(6) - 4\left(\frac{3}{4}\right)$		.33 $\frac{1}{3}\left(\frac{3}{4}\right)(6) - (2.4 + 6)$	
$14.4 - 3$		$.33(.75)(6) - 8.4$	
$\boxed{11.4}$	3	$\boxed{-6.9}$	

Grab a white board & marker! Let's evaluate

Evaluate the following expressions for a=-3, b=4, and c=2: