Do Now:

1. 8 + 3(3) =_____
2. 2(3) + 3(6) = _____
3. 4(2) - 5(1) = _____
4. 6(3) ÷ [3(3)] = _____

Sep 10-10:52 AM

Do Now:

Evaluate the following expressions:

a. $(5 - 2)^3 - 7 + 4^3$ 84

b. $7^3 + 24 \div (7 - 6)^4$ 367

c. Evaluate the expression when f = 7.
$(f - 2)^3 + 8$ 133

Sep 15-10:33 AM

pg. 12 #9

$3 \times 3 + 63 \div 9 = 9 + 63 \div 9$ ✓

$9 + 63 \div 9 = 72 \div 9$

$= 8$

$9 + 7$

16

Sep 16-9:24 AM

1.3 Variables and Expressions

7.NS.1

- SWBAT write and evaluate variable expressions.
- SWBAT represent and analyze situations using algebraic symbols.

Calculators: No

Sep 11-10:52 AM

A variable is a symbol, usually a letter, that represents one or more numbers.

Ex: x, y, s, ☺, 🐷, ▦, ☹

A variable expression consists of numbers, variables, and operations.

Ex: $x + 3 = 6$, $n + 8 = 32$, $4x = 8$, $3☺ + 8 = 24$

Sep 10-10:54 AM

Evaluate the expression when x = 8 and y = 2

a.) 7x + 15

$7(8) + 15$

$56 + 15$

71

b.) 3x - 5y

$3(8) - 5(2)$

$24 - 10$

14

Sep 10-10:58 AM

Evaluate the expression when x = 4 and y = 7

a.) 3y - 10 b.) 2x + 4y

Sep 10-10:59 AM

Evaluate the expression when a = 12 and b = 3

1. 9a (108)
2. ab (36)
3. b (a - 6) (18)
4. $\frac{6a}{a-b} = \frac{6(12)}{12-3} = \frac{72}{9} = 8$

Sep 11-10:58 AM

Writing Expressions

Addition	Subtraction	Multiplication	Division
plus	minus	the product of	divided by
increased by	less than	times	the quotient of
the sum of	subtracted from	multiplied by	divided into
more than	the difference of	of	
total	decreased by		
added to	fewer than		

Sep 10-11:00 AM

Translate the verbal phrase:

- The sum of a number and 9 — $x + 9$ ✓ (3+2) — $9 + x$ ✓ (2+3)
- The difference of a number and 21 — $x - 21$ ✓ (31-21) — $21 - x$ ✗ (21-31)
- The product of 6 and a number — $6x$ ✓ (6·3) — $x \cdot 6$ ✓ (3·6)
- The quotient of 48 and a number — $48 \div x$ (48÷2, $\frac{48}{2}$) — $x \div 48$ ✗ (2÷48, $\frac{2}{48}$)

Sep 10-11:03 AM

Note: Order is important when translating verbal expressions that suggest subtraction and division.

Example: the difference of a number and 6 means n - 6, not 6 - n

- the difference of 6 and a number means 6 - n

Example: the quotient of a number and 10 means n ÷ 10, not 10 ÷ n

- the quotient of 10 and a number means 10 ÷ n

Sep 11-10:56 AM

Translate the verbal phrase:

- a number increased by 15 — $n + 15$
- 8 times a number — $8x$
- 17 minus a number — $17 - x$
- A number divided by 2 — $x \div 2$
- the product of negative two and a number — $-2 \cdot x$

Sep 10-11:04 AM

"Perfect practice makes perfect."

Working with a partner, complete the classwork assignment.

Textbook pg. 17 #1-9

Sep 11-10:41 AM

Exit Pass 1.3

You buy a hat for $8 and rent *m* videos for $2.50 each. How much did you spend?

1. Write a variable expression for the cost to rent *m* videos.

$2.50m$

2. Add the cost of the hat to this expression.

$2.50m + 8$

3. Evaluate the expression for $m = 5$.

$2.50m + 8$
$2.50(5) + 8$
$12.50 + 8$
$\$20.50$

$$\begin{array}{r} {}^{2}2.50 \\ \times \quad 5 \\ \hline 12.50 \end{array}$$

Sep 10-10:56 AM

Reflection of Today's Lesson

1.3 Variables and Expressions
7.NS.1
SWBAT write and evaluate variable expressions. ✓
SWBAT represent and analyze situations using algebraic symbols. ✓

Sep 14-9:24 AM

Homework Textbook

pg. 18 #12, 14, 16, 18, 19-23, 26-28

Sep 10-10:59 AM