MDI: Word problem practice

- I. If Jason drives 65 mph, how long will it take him to travel 750 miles?
- 2. Ross is baking cupcakes for his co-workers. If one box makes 18 cupcakes, how many boxes will he need for 42 co-workers? (They will all eat only 1)

Substitution Review

Learning Intentions - I understand the process for substituting a value for a variable into an expression and simplifying.

Criteria for Success - I can evalute one variable expressions given the value of the variable.

When evaluating an expression, first SUBSTITUTE, then follow the ORDER of OPERATIONS.

What is the order of operations?

1.

2.

3 & 4.

5 & 6.

Examples: Substitute then evaluate.

1.
$$3(x + 5) -1$$
; $x = -2$

2.
$$7 + 3(10 - x)$$
; $x = 3$

3.
$$4 - 6(x + 3)$$
; $x = 8$

Assignment: Substitute and evaluate.

1.
$$(x + 3)^2 + 4$$
; $x = 2$

1.
$$(x + 3)^2 + 4$$
; $x = 2$ 6. $2x + (x + 1) - 2$; $x = 3$

2.
$$-5(6 + y) - 11$$
; $y = -3$ 7. $2(4y - 1) + 2y$; $y = 4$

7.
$$2(4y - 1) + 2y$$
; $y = 4$

3.
$$10 - (7 - x) + 2$$
: $x = 9$

3.
$$10 - (7 - x) + 2$$
; $x = 9$ 8. $4x + x - 4 - 26$; $x = -5$

4.
$$19 + 3(4 + y)^2$$
; $y = -1$ 9. $2y + 3(y + 7)$; $y = 31$

9.
$$2y + 3(y + 7)$$
; $y = 31$

5.
$$-8(x + 2) - 5$$
; $x = 6$

5.
$$-8(x + 2) - 5$$
; $x = 6$ 10. $-3(x + 4) - 9x$; $x = 7$

BONUS!!!!
$$2x - y = -1$$
; $y = -7 + 2x$