

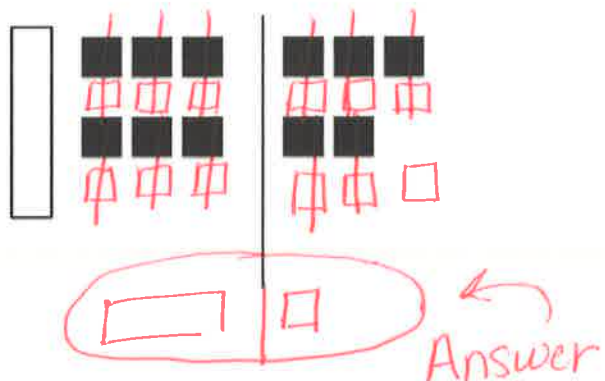
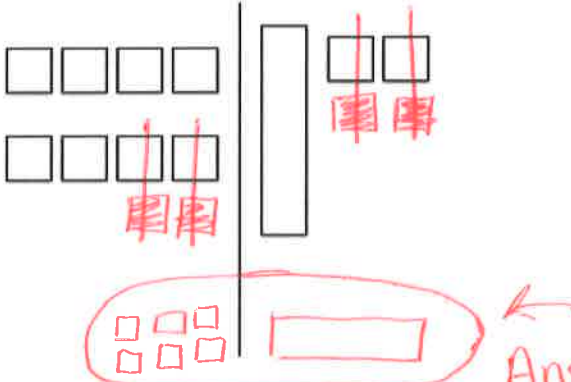
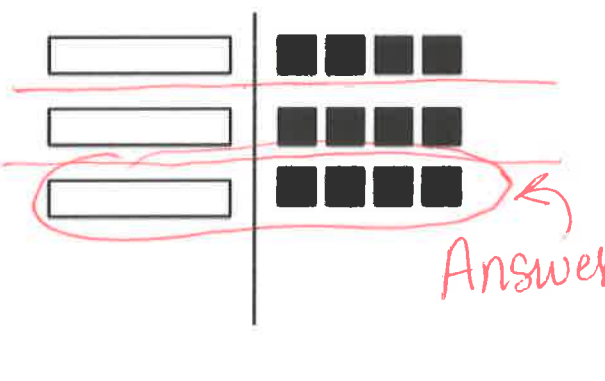
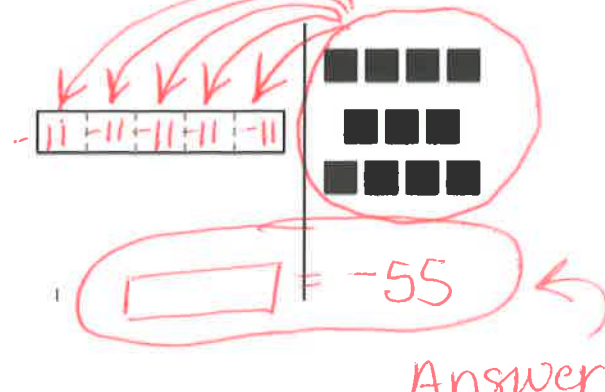
Name \_\_\_\_\_

*Keef*

Period \_\_\_\_\_

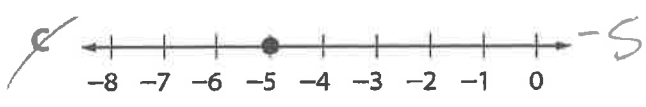
November 20, 2017

**On Level - Equations Quest Review Homework**

Solve by Completing the Models	Solve & Check Algebraically
<p>1.</p> 	<p>1.</p> $w - 6 = -5$ $+6 \quad +6$ $w = 1$ <p>✓ <math>1 - 6 = -5</math> yes!</p>
<p>2.</p> 	<p>2.</p> $8 = m + 2$ $-2 \quad -2$ $6 = m$ <p>✓ <math>8 = 6 + 2</math> yes!</p>
<p>3.</p> 	<p>3.</p> $3x = -12$ $\div 3 \quad \div 3$ $x = -4$ <p>✓ <math>3(-4) = -12</math> yes!</p>
<p>4.</p> 	<p>4.</p> $5 \cdot \frac{p}{5} = -11 \cdot 5$ $p = -55$ <p>✓ <math>\frac{-55}{5} = -11</math> yes!</p>

5. Which number line shows the solution to the equation  $x + 8 = 14$ ?

~~$x + 8 = 14$~~   
 ~~$-8$~~  /  ~~$-8$~~   
 $x = 6$



6. Sherry has 80 papers to grade by the end of the day. She has graded 20 pages so far. Write FOUR equations that could be used to determine how many papers Sherry has left to grade.

- x
- ①  $20 + x = 80$
  - ②  $80 - x = 20$
  - ③  $80 - 20 = x$
  - ④  $x + 20 = 80$

7. Circle the equation(s) is true when

$x = -2$ ? *plug in*

~~$\frac{x}{7} = -14$~~   $x = 7$

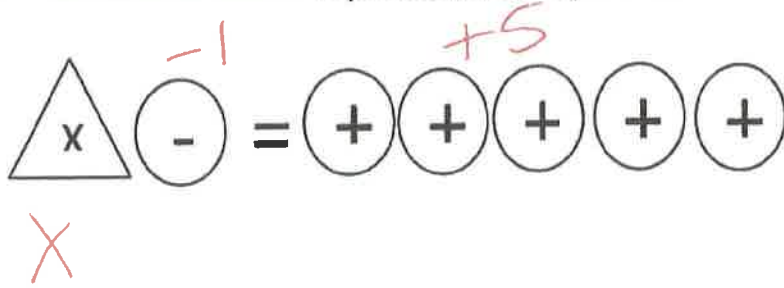
~~$\frac{-2}{7} = 14$~~  X

$-5 = x - 3$   $-5 = (-2) - 3$   
 $-5 = -5$  ✓

$-5x = 10$   $-5(-2) = 10$   
 $10 = 10$  ✓

$x + 6 = -4$   $-2 + 6 = -4$   
 $4 = -4$  X

8. The model below represents an equation. Write the equation and solve it.



$x - 1 = 5$  ← Equation

$x = 6$  ← solution

9. What is the difference between an equation and an expression?

An equation has an equal sign.

10. The total cost of 7 sandwiches at the sub shop was \$27.30. What is the cost of one sandwich? Let  $c$  = cost of one sandwich

$7c = 27.30$

$c = \$3.90$

$$\begin{array}{r}
 3.90 \\
 7 \overline{) 27.30} \\
 \underline{-21} \phantom{0} \\
 63 \\
 \underline{-63} \\
 00 \\
 \underline{-00} \\
 0
 \end{array}$$

-15+9

Solve the following equations. Please put a rectangle around your solution.  
Be sure to check your solution.

11.  $w + (-6) = 11$   
~~+6~~ | ~~+6~~  
 $w = 17$

✓  $17 + (-6) = 11$   
 $11 = 11$

12.  $m + 9 = -15$   
~~-9~~ | ~~-9~~  
 $m = -24$

✓  $-24 + 9 = -15$   
 $-15 = -15$

13.  $-6 = c - 8$   
~~+8~~ | ~~+8~~  
 $2 = c$

✓  $-6 = 2 - 8$   
 $-6 = -6$

14.  $7e = -56$   
~~7~~ | ~~7~~  
 $e = -8$

✓  $7(-8) = -56$   
 $-56 = -56$

15.  ~~$\frac{x}{9} = -4$~~   $\times 9$   
 $x = -36$

✓  $-\frac{36}{9} = -4$   
 $-4 = -4$