

Name: Key  
GSE Algebra 1

Date: \_\_\_\_\_

Period: \_\_\_\_\_

Day 02 - Solving Equations Warm-up

Solve the following equations. Show all work!

1.  $\frac{2}{3}x - 9 = 7$

$(\frac{3}{2}) \frac{2}{3}x = 16 (\frac{3}{2})$   
 $x = \frac{48}{2}$   
 $x = 24$

OK!  
 $\frac{2}{3}(24) - 9 = 7$   
 $\frac{48}{3} - 9 = 7$   
 $16 - 9 = 7$   
 $7 = 7 \checkmark$

2.  $3x + 2(x + 5) = 15$

$3x + 2x + 10 = 15$   
 $5x = 5$   
 $x = 1$

OK!  
 $3(1) + 2(1 + 5) = 15$   
 $3 + 2(6) = 15$   
 $3 + 12 = 15$   
 $15 = 15 \checkmark$

3.  $8x - 4 = 19 + 5x$

$+4 +4$   
 $8x = 23 + 5x$   
 $-5x \quad -5x$   
 $3x = 23$   
 $x = 23/3$

OK!  
 $8(23/3) - 4 = 19 + 5(23/3)$   
 $69 - 4 = 19 + \frac{115}{3}$   
 $54 = 54 \checkmark$

4.  $8x - 70 = 6x$

$-70 = -2x$   
 $\frac{-70}{-2} = \frac{-2x}{-2}$   
 $35 = x$

OK!  
 $8(35) - 70 = 6(35)$   
 $280 - 70 = 210$   
 $210 = 210 \checkmark$