

Study Guide for Algebra Review Quiz

Simplify each expression.

1) $-6k + 7k$

2) $12r - 8 - 12$

3) $n - 10 + 9n - 3$

4) $-4x - 10x$

5) $-r - 10r$

6) $-2x + 11 + 6x$

Solve each equation.

1) $5n + 5 = 45$

2) $\frac{y}{6} - 3 = -11$

3) $4(g - 1) = 24$

4) $\frac{v+9}{15} = 0$

5) $-40 = 12x + 8$

6) $-2p - 3 = -19$

7) $4p - 3 = -9 + 7p$

8) $-k - 5k = -5k - 4$

11) $-8x - 14 = 7(-2 - 4x) + 4x$

12) $16 - 2n = -8 + 4(n - 3)$

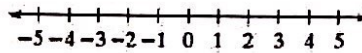
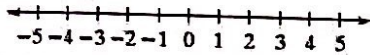
$$22) -2(x-4) - x = -(4x-10)$$

$$23) 4(11x-14) = 2(1-7x)$$

Solve each inequality. Graph the solutions on a number line.

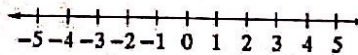
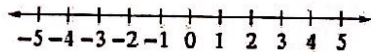
$$1. 5x + 2 \leq 17$$

$$2. 21 \leq 3 + 9x$$



$$3. 9 - x > 10$$

$$4. 27 \leq 7x + 6$$



Extra Credit: Do the below problems and check them with Mr. Scheuer to earn some extra credit!

$$24) 10(1 - 3v) = -8(6v + 1)$$

$$25) 3x + 8 + 4x = -8(x - 6) - 8(13x + 5)$$

$$26) -14(p + 1) + 4(p - 7) = -3p - p$$

$$27) 4 + 11(10 + 13x) = 13x - 2(x + 9)$$