

Algebra Review Worksheet

Name: Key _____ Class Period: _____

Simplify each expression:

1. $8p + 4p$

$12p$

2. $k - 8 - 5$

$k - 13$

3. $8n - 4n$

$4n$

4. $-1 + 3(1 - 6x)$

$2 - 18x$

Solve each equation for the given variable:

5. $2 = -3n - 4 + n$

$n = -3$

6. $r - 1 + r = 3$

$r = 2$

7. $8 = 4x - 6x$

$x = -4$

8. $-2 = 7(-8 + 2x)$

$x = \frac{27}{7}$

9. $\frac{x}{7} = \frac{2}{4}$

$x = \frac{7}{2}$ or 3.5

10. $\frac{a}{10} = 9$

$a = 90$

Solve each inequality and graph its solution on a number line:

11. $r - 6 \geq -16$

$r \geq -10$



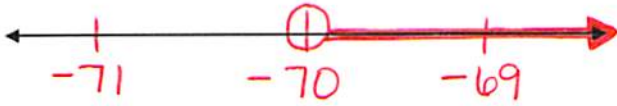
12. $x + 7 \geq 4$

$x \geq -3$



13. $\frac{v}{7} > -10$

$v > -70$



14. $4 - 2x < 8$

$x > -2$



Simplify the expression using order of operations:

15. $2[3(2-5)^2 + 6] - 1$

65

16. $\frac{8^2 - 6(4)}{2(5)} - 4$

0

17. $3 \cdot 6 + 9 \div 3 - 6$

15

18. $125 \div [1(2+3)^2]$

5

Evaluate each expression:

19. $m + p + p^2$ if $m = 8$ and $p = -6$

38

20. $x + \frac{xy}{6}$ if $x = -4$ and $y = 9$

-10