

Name: _____

Unit 1: Equations & Inequalities

Date: _____ Bell: _____

Homework 3: Solving Equations



**** This is a 2-page document! ****

Directions: Solve each equation.

1. $-5(3x - 4) + 4 = 114$

2. $-3 = \frac{9(5-2k)}{5}$

3. $\frac{15}{8}m - 11 = \frac{7}{4}m + 1$

4. $-8\left(3x - \frac{1}{4}\right) = 2(9 - 7x)$

5. $\frac{4}{9}\left(\frac{3}{8}x - \frac{27}{16}\right) = \frac{13}{4}$

6. $10 - (8p + 3) = 9(2p - 5)$

7. $-16(2r - 7) = 4(5 - 3r)$

8. $3(n + 11) - 5n = -2(n - 12) + 9$

9. $\frac{3a-1}{8} = \frac{a+9}{4}$

10. $-9 - (18v - 5) = 2(7v - 16) - 3v$

11. $4c + 9 = \frac{8c + 1 - (2c - 11)}{3}$

12. $\frac{1}{2} \left(\frac{3}{2}y + \frac{1}{3} \right) = -\frac{1}{2} \left(y - \frac{5}{2} \right)$

13. $-8 - 3(w + 13) = 4(w + 11) - 7w$

14. $\frac{5x+6}{3x-9} = \frac{7}{3}$

Directions: Solve each equation for the indicated variable.

15. $A = \frac{1}{2}\pi r^2$ (for π)

16. $\frac{x-y}{2z} = 3$ (for x)

17. $4m - n = 1$ (for n)

18. $9a = \frac{12a+3b}{4}$ (for b)