

## 8<sup>th</sup> Grade Quiz Lessons 1.8, 1.9, 2.7, 2.8

Short Answer: For each of the algebraic equations, solve the equation. Make sure to show all of your work and check your answers.

1. Solve  $x + 27 = 23$

5. Solve  $-38 = 6 - 2x$

2. Solve  $-9 + x = 41$

6. Solve  $108 = 27 - 9x$

3. Solve  $x + \frac{11}{12} = \frac{215}{12}$

7. Solve  $14s = 238$

4. Solve  $-9.4 = y - 18.2$

8. Solve  $9.4p = 47$

9. Solve  $\frac{p}{6} = 30$

13. Solve  $\frac{v}{9} + 8 = 7$

10. Solve  $\frac{t}{17.8} = -17.6$

14. Solve  $\frac{y-5}{3} = 12$

11. Solve  $4x - 3 = 17$

**15. Write your equation and solve:** In order to rent a rock climbing center, David has to pay an initial fee of \$33 plus \$22 per hour for his friends to rock climb. If David only has \$121, how many hours can David and his friends rock climb?

12. Solve  $\frac{7}{10}w = -\frac{1}{14}$

**Extra Credit: Showing all work,** solve the following:

$$-4^2(-8x - 18) - \left(\frac{1}{3^{-2}}\right)(7x + 12) - 78 = 0$$

