Solving Two-Step Equations Mini Quiz Review

Directions: Be sure to show all work, communicate your thought process, and justify your reasoning. Remember to check that your answers are complete, correct, and reasonable. If you complete work on scrap paper, please attach it. This quiz is worth 20 points.

Solve each equation. Check your solution.

3. $\frac{z}{3} - 6 = 14$ 2. 5 = 9j - 131. 2x + 13 = 78

4.
$$-8x - 24 = 64$$
 5. $(9 + h) / 7 = -12$ 6. $-4(x - 8) = -96$

7. Tatiana had \$2200 in her checking account. She withdrew the same amount each month for nine months to pay off a loan. Some point during this nine-month period, she also deposited \$580 into her account. Her new balance was \$900. Write an equation to best model the situation.

8. Solve for y. a. 8y - 9x = 20b. (2 + y) / 4 = 9x 9. Solve the equation, and describe the first step you took. -8(4x + 9) = -24

Write and solve an equation to solve each problem.

10. A man stands on a scale with two weights in his hands. By himself, the man weighs 225 pounds. The scale reads 255.5 lbs. How much does each weight weigh?

11. You are trying to save \$35 for a new pair of headphones. You currently have \$12.25 saved and plan to save the same amount each week for four consecutive weeks. How much money should you save each week?

12. You had \$240 in your bank account and withdrew the same amount each week for seven consecutive weeks. Your current balance is \$163. How much did you withdraw each week?

13. The length of a rectangle is 3 cm longer than double its width. If the perimeter of the rectangle is 30 cm, how long is the rectangle?