Name _____ Block _____

Assessment 3 Review Guide – ~~Accelerated~~ 6th Grade Math

6.EE.5 Use Substitution To Identify Solutions

1. Look at the following equation: $n + 5 = 14$
Which value(s) of n from the set {5, 7, 9, 11, 13} make the equation true? Explain your response

n=9, because it makes the equation true.

2. Evan went to the hardware store and spent $75 on wood. Each piece of wood, w, cost $12.50. The equation $12.50w = 75$ represents this situation. Which value for w satisfies the equation, given w = {1.6, 6, 8, 12.50}? Explain your response.

w=6, because it makes the equation true.

3. Stephanie sent 150 text messages in the first two weeks of this month. Then, she sent some more and now she has sent a total of 187 messages. The equation $150 + x = 187$ represents this situation. Which value for x satisfies the equation given x = {17, 20, 37, 87}?

x=37, because it makes the equation true.

4. Solve the equation. **Show your work.** $21.9 = x - 1.75$

A. 39.4 B. 20.15 C. 22.84 D. 23.65

5. Molly tutors 2 clients and earns $50. Using the equation $2x = 50$, which value from the set {$13, $15, $20, $25} represents how much money she earns per client?

A. 13 B. 15 C. 20 D. 25

6. Solve the equation below. What value of n satisfies the equation if x = {4, 9, 30, 144}? **Show how you determined your answer.**

$$\frac{x}{5} + 3 = 9$$

x=30

6.EE.6 Use Variables And Equations To Model Real-World Situations

7. It costs $140 to rent a bowling alley plus $3 per person for shoes. Write an expression to represent the cost to rent this bowling alley for n people, if the bill comes to $210 total.

140+3n=210

8. Joanne is selling 15 books at d dollars per book and earns $90 in all. Write an equation to represent this situation.

9. Cat purchased 4 theatre tickets for x dollars each and a $25.00 program. Write an equation to represent the total amount that Cat spent on the theatre tickets and the program, if she spends $85 total.

10. Rocco has five less than three times as many cookies as Steve. Write an algebraic equation to represent the situation if Rocco has 10 cookes. Be sure to define your variables.

11. A carnival charges $15 for admission and $0.25 per ticket. Write an algebraic equation to represent the situation if you spend $23.50. Be sure to define your variables.

6.EE.7 Write and Solve One-Step Equations

12. Jess bought 6 blankets, each costing b dollars. He spent a total of $75.
    a) Write an equation to represent the situation.

    b) Find the value of b.

13. Solve for x in each of the equations. Show all work and circle your solutions.

a) $x + 13 = 87$

b) $16 = x - 20$

c) $x / 8 = 4$

d) $8.6x = 51.6$

14. Mike earned $16.50 for shoveling snow, $13 for helping his neighbor, and some money for delivering newspapers. He earned a total of $60.00.

    a) Write an equation that could be used to determine how much money Mike earned for delivering newpapers. Be sure to define your variable.

    Equation: _____ Define your variable: _____

    b) Solve the equation to determine the amount of money Mike earned for delivering newspapers.