NAME_____

Math 7/7+ Quarter 2 Week 6 Weekly Spiral Review   Due: <u>**THURSDAY**</u> **11/9**
             NO CALCULATOR. You must show work for EVERY problem to receive credit.

1. Simplify: $0.4(^-3.6 - 0.5x) + 0.8(1.9 + x)$

2. Simplify: $2(3p - t) - (^-4p + t)$

3. Which expression is equivalent to $^-\frac{1}{3}\left(3x - \frac{1}{2}\right)$?

   A. $x - \frac{1}{6}$ B. $^-x + \frac{1}{6}$ C. $^-1\left(\frac{x}{3} + \frac{1}{2}\right)$ D. $^-1\left(\frac{x}{3} + \frac{1}{6}\right)$

4. Which is equivalent to $8s + 20t$ by the distributive property?

   A. $4(2s + 5t)$

   B. $4s(2 + 5t)$

   C. $8(s + 20t)$

   D. $8s(1 + 3t)$

5. Mrs. Nelson babysits 8 children. For each child, she gets paid $3.00 plus $1.20 an hour. How much does she make babysitting for 4 hours?

6. Dolphin 1 dove 200 feet under water. Dolphin 2 dove 0.3 farther. After Dolphin 2 dove down, it ascended 25 ½ feet and then descended 40 ½ feet. How far under the water is Dolphin 2?

7. What fraction is equivalent to 0.125?

8. A teacher bought a bag of candy with 240 pieces.

   - She gave 0.3 of the pieces to another teacher.
   - She put half of what was left in the bag into a jar on her desk.
   - She gave the 25 students in her class an equal amount of the remaining candy in the bag.

   How many pieces of candy does the teacher have left in the bag?

9. Liza and Marta mow lawns during the summer to earn money. Liza determined that she can earn between $6.00 and $6.25 per hour. Marta estimates that she earns between $7.50 and $8.00 per hour. About how much more money will Marta earn than Liza if they each work 22 hours?

   A. $65.01 to $85.00

   B. $45.01 to $65.00

   C. $25.01 to $45.00

   D. $5.00 to $25.00

10. Part A: A number is increased by 54. The sum is then divided by 9. The result is 21. Write an equation to represent the description above. Use *n* for the number.   Equation: _____

Part B: Find the value of *n*. Show your work.   *n* = _____

11. If $3^{\frac{2}{3}x} = 18$, then $x =$

12. From January to April, Liana saved a total of $50. She saved $10 in February, $15 in March, and $8 in April. Write an equation that will help her determine how much money (*M*) she saved in January.

13. Andrea earns a flat fee of $20 per day plus an additional *x* dollars for each sale she makes. Andrea made 10 sales last Saturday. If Andrea earned a total of $80, how much does Andrea earn for each sale she makes? **Write an equation and solve to receive credit.**

14. An ice cream store charges 75 cents for each scoop of ice cream and 25 cents for each cone. The formula $c = 0.75x + 0.25$ can be used to determine *c*, the total cost for an ice cream cone with *x* scoops of ice cream. According to the formula, how much should it cost to buy an ice cream cone with 4 scoops of ice cream?

15. A museum calculates the rate for groups using the equation $C = 4P + 8$, where *P* is the number of people and *C* is the total cost in dollars. If the cost for a group is $60, how many people are in the group?

16. Doug had a total of $75 to buy 3 pictures for his room. He paid the same amount for each picture and had $27 left over. The equation below can be used to find how much money, *m*, Doug paid for each picture.
$75 - (3 \times m) = 27$
How much money did Doug pay for each picture?

17. Mrs. Rodriguez bought 3 tickets for a concert. She also paid for a poster at the concert. Mrs. Rodriguez paid a total of $102 for the tickets and the poster. If Mrs. Rodriguez paid $29 for each ticket, *t*, how much did she pay for the poster? **Write an equation and solve to receive credit.**

18. Solve for *x*: $-15 + 3x = 7$.

19. What are all possible values of *x* if
$\frac{2}{3}x + 3 > 9?$

20. Stephanie has sold 35 candy bars to raise money for the school band. The inequality below can be used to find *x*, the number of additional candy bars Stephanie needs to sell to meet her goal of selling at least 50 candy bars.
$x + 35 \geq 50$
Which number line represents all possible values of *x*?

A.

B.

C.

D.

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