Lesson 7 – Independent Practice - Problem Set

1. Check whether the given value is a solution to the equation.

   a. $4n - 3 = -2n + 9 \qquad n = 2$

   b. $3(y + 8) = 2y - 6 \qquad y = 30$

   c. $9m - 19 = 3m + 1 \qquad m = \frac{10}{3}$

2. Tell whether each number is a solution to the following equation.

   $5 + (-8)n = 29.$

   a. Is 3 a solution to the equation? Why or why not?

   b. Is -4 a solution to the equation? Why or why not?

   c. Is -3 a solution to the equation? Why or why not?

   d. What is the mystery number?

3. The sum of three consecutive integers is 36.

   a. Let n represent the smallest integer. Write an equation that can be used to find the smallest integer.

   b. Determine if each value of n below is a solution to the equation in part (b).

      $n = 12.5$

      $n = 12$

      $n = 11$

Name : _____ Score : _____

One-Step Equations

Mixed Operations: S1

Solve each equation.

1) $2.7 = z + 9.4$

2) $k - \frac{1}{3} = 2\frac{2}{3}$

3) $11 = w - 5$

4) $8.8v = -5.28$

5) $\frac{r}{\left(-\frac{7}{9}\right)} = \frac{6}{5}$

6) $-9 = -2n$

7) $u - 4.8 = 7.6$

8) $\frac{6}{5}t = \frac{1}{3}$

9) $y + 9 = -6$

10) $-3.5 = \frac{m}{1.4}$

Independent Practice - One Step Equation Word Problems

Write an equation for each problem and solve. Show all work!

1) Dan found 57 seashells on the beach, he gave Mary some of his seashells. He has 16 seashell left. How many seashells did he give to Mary?

2) How many packs of DVD's can you buy with 105 dollars if one pack costs $15?

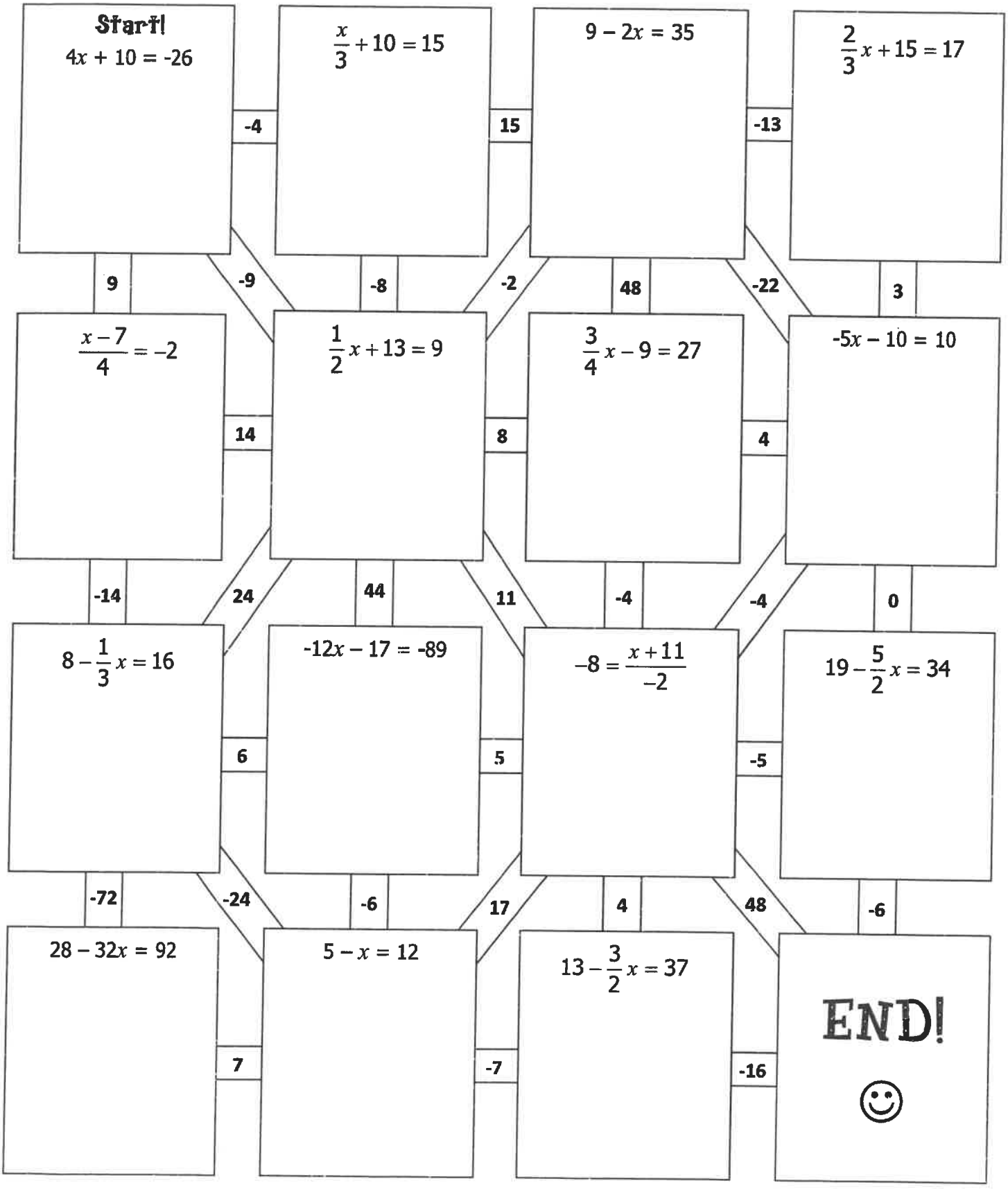
3) Last week Benny had $25. He washed cars over the weekend and now has $76. How much money did he make washing cars?

4) Jason received $91 for his birthday. He went to a sporting goods store and bought a baseball glove, baseball, and bat. He had $18 left over, how much did he spent on the baseball gear?

5) How many ink cartridges can you buy with $221 if one cartridge costs $17?

Two-Step Equation Maze!

Directions: Use your solutions to navigate through the puzzle. **SHOW ALL STEPS!!!!**



WHAT TIME IS IT??

Name:_____

MATH ROCKS

Show all work and answer each problem. Place the letter of the corresponding answer in the space below.

1) $5(x + 10) = 25$ [M]

2) $-4(x + 3) = 12$ [E]

3) $8(-3 + x) = -32$ [I]

4) $2(x - 6) = -4$ [A]

5) $\frac{2}{3}(x - 23) = 42$ [O]

6) $(x - 3)(-3) = 3$ [H]

7) $\frac{3}{4}(x + 4) = -21$ [S]

8) $\frac{4}{5}(x + 23) = 44$ [F]

9) $0.2(x - 5) = 12$ [T]

10) $-4(x + 5) = 40$ [R]

-1	65	-32	65	-1	-5	-6

32	86	-15	-5	4	65	2	!!

$\sqrt{-1}$ ♥ Math

Writing Equations

Name:_____

Translate each sentence into an equation. Then solve the equation

1) The quotient of a number and 3, less than 8, is 16

2) Tiffany spent $95 on clothes. This is $15 more than 4 times the amount her sister spent for school supplies.

3) Morgan has 98 baseball cards in his collection, which is 12 less than the product 5 and the number of cards Tyler has.

4) 18 more than twice a number is 8

5) The product of a number and 9, less than 20 is 7

6) There are 48 soccer teams in the Springtown Association. This is 3 less than three times the number of teams in the Lyon Association.

7) Eileen swam for 85 minutes. This is 21 more minutes then 4 times the number of minutes Ethan swam.

8) The product of a number and 6 is -36.

9) 6 less than twice a number is -22

10) Toya bought some fruit for $5 and 3 boxes of cereal. She spent a total of $17. How much was each box of cereal?

NAME DATE PERIOD

Equations Study Guide

1. $t + 16 = 7$

2. $\frac{w}{4} = -11$

3. $81 = 3k$

4. $-8 + \frac{5}{6}x = -28$

5. $\frac{1}{2}z = 9\frac{1}{4}$

6. $37 = 18q + 1$

7. $2y - 1.7 = 3.3$

8. $3(x - 9) = 3$

9. $0.3a = 51$

10. $-11 = x + 5$

11. $3j = 2.7$

12. $\frac{x}{8} - 2 = -3$

13. The length of each side of a square was decreased by 2 inches, so the perimeter is now 48 inches. What was the original length of each side of the square?

Equation: _____ **Solution:** _____

14. Edwin's mother is 57 years old. Her age is three years more than twice Edwin's age. What is Edwin's age?

Equation: _____ **Solution:** _____

15. In a basketball game, Benito scored 3 points less than twice the number of points Carnell scored. Benito scored 17 points. How many points did Carnell score?

Equation: _____ **Solution:** _____

16. Stephanie bought a package of pencils for $1.75 and some erasers that cost $0.25 each. She paid a total of $5.25 for all of these items. How many erasers did Stephanie buy?

Equation: _____ **Solution:** _____

Books Never Written

- *Take a Breather* by ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
  99 6 −10 −48 9 8 −75 −64 −1 −84 160
- *Fatherly Advice* by ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
  −5 6 −7 18 13 −84 24 6 4 −10 100 8
- *I Lost Every Game* by ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
  100 3 160 8 185 160 −2 −84 160 −36 9 8

Find each solution in the code. Every time it appears, write the letter of the exercise above it.

(P) $3n + 8 = 20$

(I) $7x - 2 = 61$

(C) $-5u + 6 = 41$

(S) $2d - 9 = -29$

(W) $-4y + 16 = 4$

(A) $-8t - 23 = -15$

(N) $\frac{x}{2} + 7 = 11$

(J) $\frac{k}{9} - 1 = 10$

(V) $\frac{m}{-4} + 5 = 14$

(K) $\frac{v}{-6} + 2 = -1$

(H) $\frac{n}{8} - 3 = -11$

(O) $\frac{w}{-5} + 17 = -3$

(B) $12y + 25 = -35$

(T) $\frac{-x}{3} + 4 = 20$

(E) $\frac{-a}{10} - 8 = -24$

(U) The product of a number and 9, increased by 4, is 58. Find the number.

(L) The quotient of a number and −7, decreased by 2, is 10. Find the number.