

Student: _____
Date: _____

Instructor: Ray Brown
Course: M055 Sum17 CAI 10054 G41

Assignment: ch09 rev HW

1. Click the link below to watch a video reviewing concepts in this chapter. You are encouraged to watch the video and work problems with the instructor to help ensure your understanding of the material.

Chapter 9 Review¹

- True - I understand the concept.
 False - I am not understanding the concept and intend to seek assistance.

1: <http://www.screencast.com/t/hgbyEYKpQx0>

Answer: True - I understand the concept.

2. Solve the given equation and check the solution.

$$6z + 5 = z - 2$$

The solution is $z =$ _____.
(Type an integer or a simplified fraction.)

Answer: $-\frac{7}{5}$

3. Solve the given equation and check the solution.

$$14y - 2 = 28 - y$$

The solution is _____.

Answer: 2

4. Solve the equation and check your solution.

$$5x + 3 = -(x - 15)$$

$x =$ _____

Answer: 2

5. Solve the equation and check the solution.

$$5 + 6(x - 7) = 3 - 4(x - 3)$$

The solution is $x =$ _____.
(Type an integer or a simplified fraction.)

Answer: $\frac{26}{5}$

6. Solve the formula $18x + 3y = 21$ for y .

$y =$ _____ (Simplify your answer.)

Answer: $-6x + 7$

7. Determine whether the given value of the variable is a solution to the inequality.

$$x + 7 > 9 \quad x = 3$$

Is 3 a solution? Choose the correct answer below.

- No
 Yes

Answer: Yes

8. Determine whether the given value of the variable is a solution to the inequality.

$$-4x \leq -9, x = 0$$

Is the given value a solution?

- Yes
 No

Answer: No

9. Determine whether the given value of the variable is a solution to the inequality.

$$5(t + 5) < 3t - 8, t = 7$$

Is $t = 7$ a solution to the inequality?

- Yes
 No

Answer: No

10. Select the answer that best completes the given statement.

The words "is", "gives", and "results in" are associated with the symbol (1) _____

- (1) $-$.
 $=$.
 $+$.
 \div .

Answer: (1) $=$.

11. Let x represent the number. Use the given conditions to write an equation. Solve the equation and find the number.

The sum of four and twice a number is 36. Find the number.

Write an equation for the given conditions.

Find the number.

$x =$ _____

Answers $4 + 2x = 36$

16

12. Using the variable x , translate the sentence into an equation. Solve the resulting equation.

If a number is increased by 11 and then divided by 2, the result is 7.

The algebraic equation is _____.

The number is _____.

Answers $\frac{x + 11}{2} = 7$

3

13. The sum of three consecutive natural numbers is 111. Find the numbers.
-

The numbers are _____, _____, and _____. (Use ascending order.)

Answers 36

37

38

14. Find the number.

Two times a number divided by 3 equals 10.

The solution is _____.

Answer: 15

15. In 15 years, a child will be 7 years older than twice her current age. What is the current age of the child?
-

The current age of the child is _____ years.

Answer: 8

16. Use the formula $d = rt$ to find the value of the missing variable.

$$d = 200 \text{ miles, } r = 40 \text{ mph}$$

$$t = \underline{\hspace{2cm}} \text{ hr}$$

Answer: 5

17. Two cyclists leave a city at the same time, one going east and the other going west. The west bound cyclist bikes at 9 mph faster than the east bound cyclist. After 2 hours they are 66 miles apart. How fast is each cyclist riding?
-

The west bound cyclist is riding mph.

The east bound cyclist is riding mph.

Answers 21

12

18. Nico is saving money for his college education. He invests some money at 6%, and \$1600 less than that amount at 3%. The investments produced a total of \$168 interest in 1 yr. How much did he invest at each rate?
-

He invested \$ at 6% and \$ at 3%.

Answers 2400

800
