

**Student:** \_\_\_\_\_  
**Date:** \_\_\_\_\_

**Instructor:** Ray Brown  
**Course:** M050 Sum17 CAI 10052 G43

**Assignment:** ch01\_2rev 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 2 Review<sup>1</sup>

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

1: <http://www.screencast.com/t/hdgCN7lxsCg7>

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Answer: True - I understand the concept.

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2. Solve the following equation.

$$15 = m + 6$$

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The solution is \_\_\_\_\_.  
(Simplify your answer.)

Answer: 9

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3. Evaluate the following exponential expression.

$$10^5 \cdot 20$$

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$10^5 \cdot 20 =$  \_\_\_\_\_ (Simplify your answer.)

Answer: 2,000,000

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4. Solve the following equation.

$$x + 7 = 16$$

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The solution is \_\_\_\_\_.  
(Simplify your answer.)

Answer: 9

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5. Approximate the square root to the nearest whole number.

$$\sqrt{220}$$

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$\sqrt{220} \approx$  \_\_\_\_\_

Answer: 15

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6. Evaluate the expression.

$$8 + 18 \cdot 3 \div 6$$

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$$8 + 18 \cdot 3 \div 6 = \underline{\hspace{2cm}} \text{ (Simplify your answer.)}$$

Answer: 17

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7. Evaluate the expression.

$$\frac{(7 - 3) \cdot 2}{\sqrt{49} - 3}$$

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$$\frac{(7 - 3) \cdot 2}{\sqrt{49} - 3} = \underline{\hspace{2cm}} \text{ (Simplify your answer.)}$$

Answer: 2

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8. Evaluate the expression.

$$36 - (8 \cdot 4 - (20 \div 1^4) + 3)$$

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$$36 - (8 \cdot 4 - (20 \div 1^4) + 3) = \underline{\hspace{2cm}} \text{ (Simplify your answer.)}$$

Answer: 21

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9. Is  $3x - 4$  an equation or an expression?

Choose the correct answer below.

- Expression  
 Equation

Answer: Expression

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10. Identify whether the following is an expression or an equation.

$$x + y = 9$$

Choose the correct answer below.

- Expression  
 Equation

Answer: Equation

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11. Determine whether the terms  $4a^2x^3$  and  $3a^2x^4$  are like or unlike.

Choose the correct answer below.

- A. The terms  $4a^2x^3$  and  $3a^2x^4$  are like terms.
- B. The terms  $4a^2x^3$  and  $3a^2x^4$  are unlike terms.

Answer: B. The terms  $4a^2x^3$  and  $3a^2x^4$  are unlike terms.

12. Determine whether the terms  $y^4$  and  $y$  are like or unlike.

Choose the correct answer below.

- A. The terms  $y^4$  and  $y$  are like terms.
- B. The terms  $y^4$  and  $y$  are unlike terms.

Answer: B. The terms  $y^4$  and  $y$  are unlike terms.

13. Simplify the algebraic expression.

$$5x + 11x$$

$$5x + 11x = \underline{\hspace{2cm}}$$

Answer:  $16x$

14. Insert  $<$  or  $>$  between the pair of integers to make a true statement.

$$-39 \quad -29$$

$$-39 \quad \underline{\hspace{1cm}} \quad -29$$

Answer:  $<$

15. Place the correct symbol,  $<$ ,  $>$ , or  $=$ , in the blank between the expressions.

$$|-9| \quad \underline{\hspace{1cm}} \quad -|9|$$

$$|-9| (1) \quad \underline{\hspace{1cm}} \quad -|9|$$

- (1)  =
- $>$
- $<$

Answer: (1)  $>$

16. Find the following sum.

$$- 16 + (- 95)$$

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$$- 16 + (- 95) = \underline{\hspace{2cm}}$$

Answer:  $- 111$

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17. State the addition property illustrated by the following equation.

$$8 + (- 9) = (- 9) + 8$$

Choose the correct answer below.

- Identity property for addition
- Commutative property for addition
- Inverse property for addition
- Associative property for addition

Answer: Commutative property for addition

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18. Evaluate the expression  $x + y$  for the given values of the variables.

$$x = - 47, y = - 5$$

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$$x + y = \underline{\hspace{2cm}}, \text{ for } x = - 47 \text{ and } y = - 5$$

Answer:  $- 52$

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19. A student's savings account starts the month with a balance of \$3058. The following positive entries (deposits) and negative entries (withdrawals) are made in the savings register.

$$- 279, 412, 360, \text{ and } - 1316$$

What is the ending balance?

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The ending balance is \$                     .  
(Simplify your answer.)

Answer: 2235

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20. Find the difference  $- 33 - (- 40)$ .

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$$- 33 - (- 40) = \underline{\hspace{2cm}} \text{ (Simplify your answer.)}$$

Answer: 7

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21. Simplify the following expression.

$$-33 + (-16) - (-40) + 29$$

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$$-33 + (-16) - (-40) + 29 = \underline{\hspace{2cm}}$$

Answer: 20

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22. An overdrawn checking account has a balance of  $-\$41$ . An amount of money is deposited to bring the balance to  $\$120$ . How much money has been deposited?

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The amount of \$                      has been deposited.

(Simplify your answer.)

Answer: 161

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23. Multiply the following.

$$-2 \cdot 7 \cdot 4$$

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$$-2 \cdot 7 \cdot 4 = \underline{\hspace{2cm}}$$

Answer:  $-56$

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24. Multiply the following.

$$6(-2)(0)(3)$$

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$$6(-2)(0)(3) = \underline{\hspace{2cm}}$$

Answer: 0

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25. State the multiplication property illustrated by the following equation.

$$15 \cdot (-28 \cdot 43) = (15 \cdot (-28)) \cdot 43$$

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Choose the correct answer below.

- Associative property of multiplication
- Distributive property of multiplication
- Commutative property of multiplication

Answer: Associative property of multiplication

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26. State the multiplication property illustrated by the following equation.

$$-347 \cdot 0 = 0$$

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Choose the correct answer below.

- Identity property of multiplication
- Zero property of multiplication
- Commutative property of multiplication

Answer: Zero property of multiplication

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27. Evaluate.

$$-7^3$$

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$$-7^3 = \underline{\hspace{2cm}}$$

Answer: - 343

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28. Evaluate.

$$(-11)^3$$

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$$(-11)^3 = \underline{\hspace{2cm}}$$

Answer: - 1331

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29. Evaluate the expression  $3m + (4^2 + n)$  for  $m = 7$  and  $n = -32$ .

For  $m = 7$  and  $n = -32$ ,  $3m + (4^2 + n) = \underline{\hspace{2cm}}$ .  
(Simplify your answer.)

Answer: 5

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30. Evaluate the following expression.

$$34 - |1 + 4^2 \div (-2)|$$

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$$34 - |1 + 4^2 \div (-2)| = \underline{\hspace{2cm}} \text{ (Simplify your answer.)}$$

Answer: 27

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31. Which of the following expressions are evaluated correctly?

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Select all that apply.

A.  $\frac{1 - 3 \times 4}{-3 + 8} = -\frac{8}{5}$

B.  $-1 - 2^3 = -9$

C.  $13 - 3^2 \div (-2) = \frac{35}{2}$

D.  $2 - 4 \div 2 + 4 \times (-2) = -8$

E.  $-4^2 = 16$

Answer: B.  $-1 - 2^3 = -9$ , C.  $13 - 3^2 \div (-2) = \frac{35}{2}$ , D.  $2 - 4 \div 2 + 4 \times (-2) = -8$

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32. Solve the following equation.

$$16 - 2x = 2$$

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The solution is \_\_\_\_\_.  
(Simplify your answer.)

Answer: 7