

**LESSON**  
**2-3**

**Applying Integer Operations**

**Reteach**

To evaluate an expression, follow the order of operations.

1. Multiply and divide in order from left to right.  $(-5)(6) + 3 + (-20) \div 4 + 12$   
 $-30 + 3 + (-20) \div 4 + 12$

$-30 + 3 + (-20) \div 4 + 12$

$-30 + 3 + (-5) + 12$

2. Add and subtract in order from left to right.  $-30 + 3 + (-5) + 12$

$-27 + (-5) + 12$

$-32 + 12 = -20$

Name the operation you would do first.

1.  $-4 + (3)(-8) + 7$

\_\_\_\_\_

2.  $-3 + (-8) - 6$

\_\_\_\_\_

3.  $16 + 72 \div (-8) + 6(-2)$

\_\_\_\_\_

4.  $17 + 8 + (-16) - 34$

\_\_\_\_\_

5.  $-8 + 13 + (-24) + 6(-4)$

\_\_\_\_\_

6.  $12 \div (-3) + 7(-7)$

\_\_\_\_\_

7.  $(-5)6 + (-12) - 6(9)$

\_\_\_\_\_

8.  $14 - (-9) - 6 - 5$

\_\_\_\_\_

Find the value of each expression.

9.  $(-6) + 5(-2) + 15$

\_\_\_\_\_

10.  $(-8) + (-19) - 4$

\_\_\_\_\_

11.  $3 + 28 \div (-7) + 5(-6)$

\_\_\_\_\_

12.  $15 + 32 + (-8) - 6$

\_\_\_\_\_

13.  $(-5) + 22 + (-7) + 8(-9)$

\_\_\_\_\_

14.  $21 \div (-7) + 5(-9)$

\_\_\_\_\_

**LESSON**  
**2-3**

# Applying Integer Operations

## Practice and Problem Solving: D

Find the value of each expression. Show your work. The first one is done for you.

1.  $15 + (-6)(2)$

$= 15 + (-12)$      **Multiply**

$= 3$      **Add.**

2.  $(-5)(-3) + 18$

3.  $42 \div (-6) + 23$

4.  $52 + 45 \div (-9)$

Write an expression to represent each situation. Then find the value of the expression to solve the problem. The first one is done for you.

5. Mr. Carlisle paid his utility bills last weekend. He paid \$50 to the phone company, \$112 to the power company, and \$46 to the water company. After he paid those bills, what was the change in the total amount of money that Mr. Carlisle had?

$(-50) + (-112) + (-46) = -208$ ; He had \$208 less.

6. Over 5 straight plays, a football team gained 8 yards, lost 4 yards, gained 7 yards, gained 3 yards, and lost 11 yards. What is the team's position now compared to their starting position?

7. At the grocery store, Mrs. Knight bought 4 pounds of apples for \$2 per pound and 2 heads of lettuce for \$1 each. She had a coupon for \$3 off the price of the apples. After her purchases, what was the change in the amount of money that Mrs. Knight had?

8. The depth of the water in a water tank changes every time someone in the Harrison family takes a bath or does laundry. A bath lowers the water level by 4 inches. Washing a load of laundry lowers the level by 2 inches. On Monday the Harrisons took 3 baths and washed 4 loads of laundry. By how much did the water level in the water tank change?

**LESSON**  
**1-4****Applying Addition and Subtraction of Integers****Practice and Problem Solving: D**

**Write an expression to represent the situation. Then solve by finding the value of the expression. The first one is done for you.**

1. Jeremy is fishing from a dock. He starts with the bait 2 feet below the surface of the water. He lowers the bait 9 feet, then raises it 3 feet. What is the final position of the bait relative to the surface of the water?

$-2 - 9 + 3 = -8$ ; 8 feet below the surface of the water

2. Rita earned 20 points on a quiz. She lost 5 points for poor penmanship, then earned 10 points of extra credit. What is Rita's final score on the quiz?

**Find the value of each expression. The first one is done for you.**

3.  $-7 + 1 + 5$

$-1$

4.  $-5 - 9 - 10$

5.  $40 - 30 + 10$

6.  $2 + 8 - 19$

7.  $-12 + 14 + 6$

8.  $50 + 60 - 10$

**Compare the expressions. Write  $<$ ,  $>$ , or  $=$ .**

9.  $-20 + 5 - 10$    $-10 - 11 + 30$

10.  $-10 + 40 - 5$    $25 - 15 + 3$

**Solve.**

11. Angela is competing in a dance competition. If a dance move is done correctly, the dancer earns points. If a dance move is done incorrectly, the dancer loses points. Angela currently has 200 points. Angela then loses 30 points and earns 70 points. Write and evaluate an expression to find Angela's final score.