TESSON Practice C

1-4 Order of Operations

Evaluate each expression.

1.
$$42 - 3 \cdot 10 + 2$$

2.
$$1 + 4^3 - 16$$

3.
$$(15-6) \cdot 2 + 20$$

4.
$$(5^2 + 3^2 + 2) \div 6$$
 5. $61 - 5 \cdot 2^3 + 5$

5.
$$61 - 5 \cdot 2^3 + 5$$

6.
$$7 \cdot 8 + (2 \cdot 4) \div 2^2$$

Insert parentheses so that each equation is correct.

7.
$$12 - 3 \cdot 2 + 4^2 = 34$$

8.
$$72 \div 2 \cdot 4 \div 3 = 3$$

9.
$$13 + 7 - 6 + 4 \cdot 2 = 0$$

10.
$$28 \div 7 + 3^3 - 3^2 - 1 = 21$$

Use each of the numbers 2, 3, 4, and 6 once to make each equation correct.

- **15.** Use an exponent to write an expression with five 3s that has a value of 0.
- **16.** Mrs. Thompson is putting new tile on her bathroom floor. Each tile measures 2 inches on each side. The bathroom floor is 3 feet long and 2 feet wide. How many tiles will she use to cover the entire floor?

Practice B

1-4 Order of Operations

Evaluate each expression.

1.	10	+	6	•	2	

4. $(4^2 + 6) \div 11$

7. $5 + 18 \div 3^2 - 1$

Insert parentheses so that each equation is correct.

10.
$$7 + 9 \cdot 3 - 1 = 25$$

11.
$$2^3 - 7 \cdot 4 = 4$$

12.
$$5 + 6 \cdot 9 \div 3 = 23$$

$$(2^3-7)$$

$$(9 \div 3)$$

14.
$$8 + 3 \cdot 6 - 4 - 1 = 13$$
 15. $4 \cdot 3^2 + 1 = 40$

$$\frac{(6-4)}{17.\ 15 \cdot 3^2 - 2^3} = 15$$

$$(3^2 + 1)$$

16.
$$9 \cdot 0 + 5 - 3 = 42$$

18.
$$14 \div 2 + 5 \cdot 5 = 10$$

$$(0 + 5)$$

$$(3^2-2^3)$$

19. Tyler walked 2 miles a day for the first week of his exercise plan. Then he walked 3 miles a day for the next 9 days. How many miles did Tyler walk in all?

41 miles

20. Paulo's father bought 8 pizzas and 12 bottles of juice for the class party. Each pizza cost \$9 and each bottle of juice cost \$2. Paulo's father paid with a \$100-bill. How much change did he

Copyright © by Holt, Rinehart and Winston. All rights reserved.

38

Holt Middle School Math Course 1

Practice C

1-4 Order of Operations

Evaluate each expression.

4.
$$(5^2 + 3^2 + 2) \div 6$$

5.
$$61 - 5 \cdot 2^3 + 5$$

6.
$$7 \cdot 8 + (2 \cdot 4) \div 2^2$$

Insert parentheses so that each equation is correct.

7.
$$12 - 3 \cdot 2 + 4^2 = 34$$

8.
$$72 \div 2 \cdot 4 \div 3 = 3$$

$$(12 - 3)$$

9.
$$13 + 7 - 6 + 4 \cdot 2 = 0$$

10.
$$28 \div 7 + 3^3 - 3^2 - 1 = 21$$

$$(6 + 4)$$

$$(3^3 - 3^2)$$

Use each of the numbers 2, 3, 4, and 6 once to make each equation correct. Possible answers are

$$(6-3)+2\cdot 4$$

$$2 \cdot 4 - (6 \div 3)$$

$$6 + (2 \cdot 3) \cdot 4$$

$$4 \div 2 + 6 \cdot 3$$

15. Use an exponent to write an expression with five 3s that has a value of 0.

Possible answer: $3 \cdot 3 \cdot 3 - 3^3$

16. Mrs. Thompson is putting new tile on her bathroom floor. Each tile measures 2 inches on each side. The bathroom floor is 3 feet long and 2 feet wide. How many tiles will she use to cover the entire floor?

216 tiles

Copyright © by Holt, Rinehart and Winston. All rights reserved.

39

Holt Middle School Math Course 1

Reteach

1-4 Order of Operations

A mathematical phrase that includes only numbers and operations is called a numerical expression.

9 + 8 • 3 ÷ 6 is a numerical expression.

To evaluate a numerical expression, you find its value.

You can use the order of operations to evaluate a numerical expression.

Order of Operations

- Do all operations within parentheses.
 Find the values of the numbers with exponents.
- 3. Multiply and divide in order from left to right. 4. Add or subtract in order from left to right.

Evaluate the expression.

60 ÷ (7 + 3) + 7 60 ÷ 10 + 7 6 + 7

Do all operations within parentheses.

Multiply and divide in order from left to right. Add and subtract in order from left to right.

13

Evaluate each expression.

4.
$$2^3 + (10 - 4)$$

33

$$\frac{14}{7.5^2 - (2 \cdot 8) + 9}$$

Copyright © by Holt, Rinehart and Winston. All rights reserved.

8.
$$3 \cdot (12 \div 4) - 2^2$$

463

40 Holt Middle School Math Course 1

Challenge

1-4 Crack the Expression Code

Each of these symbols stands for a different operation symbol:





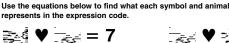




Each of these animals stands for a different whole number 1-4:







≥4 ♣ BJ = BJ

OPERATIONS

NUMBERS

41

Holt Middle School Math Course 1