REVIEW: Order of Operations

Name _____

Key Concept and Vocabulary

Order of Operations

1. Perform operations in parentheses.
2. Multiply and divide from left to right.
3. Add and subtract from left to right.

Simplify $5 + 3 \times 6 - 4$.

$$5 + 3 \times 6 - 4 = 5 + 18 - 4$$
$$= 23 - 4$$
$$= 19$$

Skill Examples

1. $16 + 8 \div 4 = 16 + 2 = 18$

2. $3 \times 5 - 3 = 15 - 3 = 12$

3. $2 \times (3 - 1) = 2 \times 2 = 4$

4. $7 \times (16 \div 8) = 7 \times 2 = 14$

5. $4 + (8 - 6 \div 3) = 4 + (8 - 2) = 4 + 6 = 10$

Application Example

6. You buy 3 packs of trading cards. Each pack has 12 cards. You give 4 trading cards to your friend. Use the expression $3 \times 12 - 4$ to find how many trading cards you have now.

$$3 \times 12 - 4 = 36 - 4$$
$$= 32$$

You have 32 trading cards.

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Evaluate the expression.

7. $8 - 6 \div 2 =$ __5__

8. $3 \times 5 + 2 =$ __17__

9. $20 \div 10 \times 2 =$ __4__

10. $10 \times 4 - 3 =$ __37__

11. $5 + 3 - 18 \div 3 =$ __2__

12. $28 \div (25 - 18) =$ __4__

13. $22 \div (14 - 3) =$ __2__

14. $(18 - 4) \div 2 =$ __7__

15. $15 - (4 + 15 \div 3) =$ __6__

Insert parentheses to make the statement true.

16. $36 \div (6 - 2) = 9$

17. $24 \div (2 \times 4) + 5 = 8$

18. $9 + 4 \times (8 - 6) = 17$

19. **SOCKS** You order 12 pairs of socks that each cost $2. The order has a $7 shipping fee.

a. Use the expression $12 \times 2 + 7$ to find how much you spend on the order. __$31__

b. Each pair of socks is discounted $0.50. Use the expression $12 \times (2 - 0.5) + 7$ to find how much you spend on the order when the discount is applied. __$25__