

Name _____

Evaluate Expressions Involving Exponents**COMMON CORE STANDARD—6.EE.1**
*Apply and extend previous understandings of arithmetic to algebraic expressions.***Evaluate the expression.**

1. $5 + 17 - 10^2 \div 5$

2. $7^2 - 3^2 \times 4$

3. $2^4 \div (7 - 5)$

$$5 + 17 - 100 \div 5$$

$$5 + 17 - 20$$

$$22 - 20$$

$$2$$

4. $(8^2 + 36) \div (4 \times 5^2)$

5. $12 + 21 \div 3 + (2^2 \times 0)$

6. $(12 - 8)^3 - 24 \times 2$

Place parentheses in the expression so that it equals the given value.

7. $12 \div 2 \times 2^3$; value: 120

8. $7^2 \times 1 - 5 \div 3$; value: 135

Problem Solving

9. Hugo is saving for a new baseball glove. He saves \$10 the first week, and \$6 each week for the next 6 weeks. The expression $10 + 6^2$ represents the total amount in dollars he has saved. What is the total amount Hugo has saved?

10. A scientist placed fish eggs in a tank. Each day, twice the number of eggs from the previous day hatch. The expression 5×2^6 represents the number of eggs that hatch on the sixth day. How many eggs hatch on the sixth day?