Cumulative Review Units 1&2

Name Answer Key
Date _____

Write each expression in exponential form.

1. $6 \cdot 6 \cdot 6 \cdot 6 \cdot 6$ → 6^5

2. $16 \cdot 16 \cdot 16 \cdot 16$ → 6^4

Compare. Write >, <, or =. Justify your answer.

3. 2^4 ◯ 3^3

$2 \cdot 2 \cdot 2 \cdot 2$
$4 \cdot 4$
16

$3 \cdot 3 \cdot 3$
$9 \cdot 3$
27

4. 5^4 ◯ $10 \cdot 10$

$5 \cdot 5 \cdot 5 \cdot 5$
$25 \cdot 25$
625

100

Evaluate each expression.

5. $12 - (36 \div 2^2) + 3$

$12 - 9 + 3$
$3 + 3$
6

6. $12 \cdot 4 - 12 \div 6$

$48 - 2$
46

Write an expression for the situation. Then evaluate your expression to answer the question.

7. Last week Amy read 3 days for 110 minutes each day and for 4 days she read 70 minutes each day. How many total minutes did Amy read last week?

$3 \cdot 110 + 4 \cdot 70$

Expression: $(3 \cdot 110) + (4 \cdot 70)$

$(3 \cdot 110) + (4 \cdot 70)$
$330 + 280$

Answer: 610 minutes

$330 + 280 = 610$

8. Evaluate the expression to find each missing value in the table.

8.

x	$6x - 7$
4	17
5	23
10	53

24-7
30-7
60-7

9. Evaluate $\frac{x}{9}$ for $x = 63$.

63÷9

9. 7

Write an expression for each situation.

10. Let h represent the number of hours each student in Mrs. Beran's class read last week. Mrs. Ridder's class read 9 more hours than Mrs. Beran's class. Write an expression for the number of hours that Mrs. Ridder's class read.

h +9

Expression: h+9

11. Mr. Nelson has 5 times as many papers to check as Mrs. Cownie. Let p represent the number of papers that Mrs. Cownie has Write an expression that represents the total number of papers Mr. Nelson must check.

5 • p

not p5

Expression: 5p
or 5 • p

12. Find an expression for the table.

v	$v-5$
62	-5 = 57
81	-5 = 76
96	-5 = 91

Solve each equation. Be sure to show your work and check your work.

13. $22 = y - 10$

$+10 \quad +10$

$32 = y$

14. $\frac{12v}{12} = 6 \cdot 12$

$v = 72$

15. $13 + p = 32$

$-13 \quad -13$

$p = 19$

16. Tom weighs 125 pounds. Jim is heavier than his brother, Tom. The difference in Tom and Jim's weight is 15 pounds. How much does Jim weigh?

Jim (heavier) $-$ 125 (Tom $= 15$

(=) 15

a. $j + 125 = 15$

b. $j - 125 = 15$

c. $j - 15 = 125$

d. $125 + 15 = j$

17. The area of a rectangle is 72 square meters. The length of the rectangle is 8 meters. What is the width? Area = length x width

Area = Length • Width

$72 = 8 \cdot w$

a. $72 = 8w$

b. $72 = 2w + 8$

c. $72w = 8$

d. $72 = 2w$

Write and solve an addition equation for the situation.

18. Cooper plans to enter a relay race. The total race is 36 miles long. The amount of the course that Cooper will run is 9 miles. Let m represent the number of miles his other team members will have to run. Write and solve an addition equation to find out how many miles the rest of the team will run.

Equation: $9 + m = 36$ (Total)

$-9 \quad -9$

$m = 27$

Solution: 27 miles