

Chapter 1 Practice Quiz

Show your work on the problems with an asterisk *.

1. Write the expression $4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4$ in exponential form.

4^7

2. Write the expression $9 \times 9 \times 9 \times 9 \times 9$ in exponential form.

9^5

3. Write the expression $5 \times 5 \times 5 \times 5$ in exponential form.

5^4

4. Write the expression 8×8 in exponential form.

8^2

5. * Write the expression as repeated multiplication 4^3 .

$4 \times 4 \times 4$

6. * Write the expression as repeated multiplication 2^5 .

$2 \times 2 \times 2 \times 2 \times 2$

7. * Find the value of 9^2 .

$9 \times 9 = 81$

8. * Find the value of 3^4 .

$3 \times 3 \times 3 \times 3 = 81$

9. * Evaluate the expression $7 \times 3 \div (8 - 5)$.

7 $7 \times 3 = 21$
 $21 \div 3 = 7$

10. * Evaluate $10 + (8 - 4) \times 6$.

34 $10 + 4 \times 6$
 $10 + 24$

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11. * Evaluate $3^3 - 6 \times 4 - 2$.

$$\begin{aligned} & 27 - 6 \times 4 - 2 \\ & \underline{27 - 24 - 2 = 1} \end{aligned}$$

12. * Evaluate the expression $30 \div (1 + 2) \cdot 2^3 - 5$.

$$\begin{aligned} & 30 \div 3 \times 8 - 5 \\ & \underline{75} \quad 10 \times 8 - 5 = \end{aligned}$$

13. * A school is having a fund-raiser in which the students sell calendars and raffle tickets. Each calendar costs \$12. Each raffle ticket costs \$4. If a student sold 5 calendars and 6 raffle tickets, evaluate $5 \times 12 + 6 \times 4$ to find how much money the student should collect.

$$\begin{aligned} & \$84 \quad 5 \times 12 + 6 \times 4 \\ & \underline{\hspace{1.5cm}} \quad 60 + 24 \end{aligned}$$

14. * Compare. Write $<$, $>$ or $=$.

$$6^3 \underline{<} 7^2 \quad 6^2 \underline{<} 7$$

15. * Compare. Write $<$, $>$ or $=$.

$$\begin{aligned} & 8^2 \underline{=} 4^3 \quad 64 \underline{=} 64 \\ & 8 \cdot 8 \quad 4 \cdot 4 \cdot 4 \end{aligned}$$

16. * Compare. Write $<$, $>$ or $=$.

$$6^2 \underline{>} 3^3 \quad 36 \quad 27$$

17. $6 \cdot 6 \quad 3 \cdot 3 \cdot 3$

Add parentheses so that the equation is correct. Explain.

$$(5 + 7) \times 2 - 3 = 21$$

$$12 \times 2 - 3 = 21$$