

Write using an exponent.

1.  $2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$

2.  $7 \cdot 7 \cdot 7 \cdot 7 \cdot 7$

3.  $6 \cdot 6 \cdot 6$

4.  $-5 \cdot -5 \cdot -5 \cdot -5$

5.  $9 \cdot 9 \cdot 9 \cdot 9 \cdot 9 \cdot 9$

6.  $12 \cdot 12 \cdot 12 \cdot 12$

Simplify.

7.  $9^2$

8.  $10^8$

9.  $-3^4$

10.  $(-3)^4$

11.  $(-2)^3$

12.  $(-4)^3$

Simplify using the order of operations.

13.  $2^3 \cdot (6-3)^2$

14.  $(2^3 \cdot 6) - 3^2$

15.  $2^3 \cdot 6 - 3^2$

16.  $-3^2 + 2^3 \cdot 6$

17.  $3^2 - 2^3$

18.  $(2+1)^3 \div 3^2$

19. Without calculating, decide whether the value of  $(-672)^2 - 192$  is positive or negative. Explain your reasoning.