

Powers & Roots

Numbers & Patterns · Grade 6

Score: _____ / 10

● Easy · 10 Questions

Solve each problem. Show your work in the space provided. Write your answer on the line.

1. Evaluate: 2^3

Answer: _____

2. Evaluate: 5^2

Answer: _____

3. Evaluate: 3^4

Answer: _____

4. Evaluate: 10^3

Answer: _____

5. Evaluate: 4^2

Answer: _____

6. What is 2^0 ?

Answer: _____

7. Write 64 as a power of 2.

Answer: _____

8. Evaluate: 6^2

Answer: _____

9. What is 1^5 ?

Answer: _____

10. In 7^3 , what is the base and what is the exponent?

Answer: _____

Answer Key

Powers & Roots — Easy

1. 8

$$2^3 = 2 \times 2 \times 2 = 8.$$

2. 25

$$5^2 = 5 \times 5 = 25.$$

3. 81

$$3^4 = 3 \times 3 \times 3 \times 3 = 81.$$

4. 1,000

$$10^3 = 10 \times 10 \times 10 = 1,000.$$

5. 16

$$4^2 = 4 \times 4 = 16.$$

6. 1

Any number raised to the power 0 equals 1: $2^0 = 1$.

7. 2^6

$2^1=2$, $2^2=4$, $2^3=8$, $2^4=16$, $2^5=32$, $2^6=64$. So $64=2^6$.

8. 36

$$6^2 = 6 \times 6 = 36.$$

9. 1

1 raised to any power is always 1: $1^5=1 \times 1 \times 1 \times 1 \times 1=1$.

10. **Base = 7, Exponent = 3.**

In a^n , a is the base and n is the exponent/index. 7^3 : base=7, exponent=3.