



# Exponents

## Grade 5 Exponents Worksheet

Base  $\longrightarrow$   $2^3 = 2 \times 2 \times 2$

Exponent  $\swarrow$

**The exponent tells us how many times the base is multiplied by itself.**

Rewrite the following exponents using repeated multiplication and solve.  
For example,  $3^2 = 3 \times 3 = 9$

1)  $11^2 =$  \_\_\_\_\_

6)  $10^4 =$  \_\_\_\_\_

2)  $7^2 =$  \_\_\_\_\_

7)  $4^6 =$  \_\_\_\_\_

3)  $3^4 =$  \_\_\_\_\_

8)  $6^3 =$  \_\_\_\_\_

4)  $9^2 =$  \_\_\_\_\_

9)  $8^4 =$  \_\_\_\_\_

5)  $2^3 =$  \_\_\_\_\_

10)  $5^5 =$  \_\_\_\_\_

Rewrite the following expressions using exponents.

For example,  $5 \times 5 = 5^2$

11)  $5 \times 5 \times 5 \times 5 \times 5 =$  \_\_\_\_\_

12)  $6 \times 6 \times 6 =$  \_\_\_\_\_

13)  $18 \times 18 =$  \_\_\_\_\_

14)  $4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 =$  \_\_\_\_\_

15)  $3 \times 3 \times 3 \times 3 \times 3 =$  \_\_\_\_\_

16)  $9 \times 9 \times 9 =$  \_\_\_\_\_

17)  $7 \times 7 \times 7 \times 7 =$  \_\_\_\_\_

18)  $10 \times 10 \times 10 \times 10 \times 10 =$  \_\_\_\_\_

19)  $11 \times 11 \times 11 =$  \_\_\_\_\_

20)  $20 \times 20 =$  \_\_\_\_\_





## Answers

- 1)  $11 \times 11 = 121$
- 2)  $7 \times 7 = 49$
- 3)  $3 \times 3 \times 3 \times 3 = 81$
- 4)  $9 \times 9 = 81$
- 5)  $2 \times 2 \times 2 = 8$
- 6)  $10 \times 10 \times 10 \times 10 = 10,000$
- 7)  $4 \times 4 \times 4 \times 4 \times 4 \times 4 = 4,096$
- 8)  $6 \times 6 \times 6 = 216$
- 9)  $8 \times 8 \times 8 \times 8 = 4,096$
- 10)  $5 \times 5 \times 5 \times 5 \times 5 = 3,125$
- 11)  $5^5$
- 12)  $6^3$
- 13)  $18^2$
- 14)  $4^7$
- 15)  $3^5$
- 16)  $9^3$
- 17)  $7^4$
- 18)  $10^5$
- 19)  $11^3$
- 20)  $20^2$