

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