

## Prime Factorization Answer Key

1. Which is the prime factorization of 100?

- a.  $2 \times 50$
- b.  $2 \times 2 \times 25$
- c.  $4 \times 25$
- d.  $2 \times 5 \times 2 \times 5$**

2. What is the prime factorization of 28

- a.  $2 \times 2 \times 4 \times 7$
- b.  $2 \times 2 \times 7$**
- c.  $4 \times 7$

3. The prime factorization of 48 is

- a.  $2 \times 2 \times 2 \times 2 \times 3$**
- b.  $2 \times 2 \times 2 \times 3$
- c.  $2 \times 3 \times 2 \times 4$

4. What is the prime factorization of 27?

- a.  $3 \times 3 \times 9$
- b.  $3 \times 9$
- c.  $3 \times 3 \times 3$**

5. What is the prime factorization of 125?

**$5 \times 5 \times 5$**

6. What is the prime factorization of 56?

**$2 \times 2 \times 2 \times 7$**

7. What is the prime factorization of 9?

**$3 \times 3$**

8. What is the prime factorization of 60?

**$2 \times 2 \times 3 \times 5$**

9. What is the prime factorization of 72?

**$2 \times 2 \times 2 \times 3 \times 3$**

10. write the prime factorization of 160?

**$2 \times 5 \times 2 \times 2 \times 2$**

11. What is the prime factorization of 54?

**$2 \times 2 \times 2 \times 7$**

12. Find the prime factorization:

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$$2 \cdot 2 \cdot 3 \cdot 3 \cdot 3$$