

Inverse Operations: Squares and Roots

Name: _____

Date: _____

Remember: Squaring and finding the square root are inverse operations. If $5^2 = 25$, then $\sqrt{25} = 5$.

Part A: Perfect Squares

Calculate the following:

1. $7^2 =$ _____

2. $12^2 =$ _____

3. $9^2 =$ _____

4. $15^2 =$ _____

5. $11^2 =$ _____

6. $20^2 =$ _____

7. $13^2 =$ _____

8. $6^2 =$ _____

Part B: Square Roots

Find the square root of each number:

9. $\sqrt{64} =$ _____

10. $\sqrt{100} =$ _____

11. $\sqrt{49} =$ _____

12. $\sqrt{144} =$ _____

13. $\sqrt{81} =$ _____

14. $\sqrt{169} =$ _____

15. $\sqrt{225} =$ _____

16. $\sqrt{196} =$ _____

Part C: Using the Inverse Relationship

Fill in the missing values:

17. If $8^2 = 64$, then $\sqrt{64} =$ _____

18. If $\sqrt{121} = 11$, then $11^2 =$ _____

19. If $14^2 = 196$, then $\sqrt{196} =$ _____

20. If $\sqrt{400} = 20$, then $20^2 =$ _____

21. If $16^2 = 256$, then $\sqrt{256} =$ _____

Part D: Problem Solving

22. A square garden has an area of 289 m^2 . What is the length of one side?

Answer: _____

23. If you square a number and get 361, what was the original number?

Answer: _____

24. What number, when multiplied by itself, equals 324?

Answer: _____