

Unit 7: Introduction to Quadratic Functions

CONCEPT

Name: _____ Date: _____

Solve each problem and write your short answer on the line. Show your work where helpful.

1. A square has side length 4. What is its area (side²)?

Answer: _____

3. For the quadratic function $f(x) = x^2$, find $f(-5)$.

Answer: _____

5. For $g(x) = x^2 + 1$, find $g(2)$.

Answer: _____

7. For $f(x) = x^2$, compute the change $f(2) - f(1)$. (This is the increase from $x=1$ to $x=2$.)

Answer: _____

9. For $h(x) = 2x^2$, find $h(3)$.

Answer: _____

11. A quadratic function is given by $A(s) = s^2$, the area of a square with side s . Find $A(7)$.

Answer: _____

2. For the quadratic function $f(x) = x^2$, find $f(3)$.

Answer: _____

4. A quadratic pattern gives the number of small squares in step n as n^2 . How many squares are in step 6?

Answer: _____

6. The vertex of the parabola $y = x^2$ is at what coordinate pair?

Answer: _____

8. For $f(x) = x^2$, compute the change $f(3) - f(2)$. (This is the increase from $x=2$ to $x=3$.)

Answer: _____

10. For $f(x) = x^2$, find $f(0)$.

Answer: _____

12. For $f(x) = x^2$, is $f(-4)$ equal to $f(4)$? Answer yes or no.

Answer: _____