

In Exercises 3–8, graph the function. Compare the graph to the graph of $f(x) = x^2$.

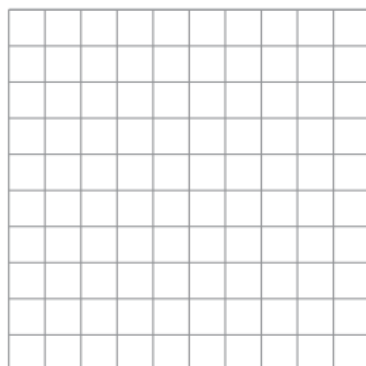
3. $g(x) = 5x^2$



4. $m(x) = -4x^2$



5. $k(x) = -x^2$



6. $l(x) = -7x^2$



7. $n(x) = -\frac{1}{5}x^2$



8. $p(x) = 0.6x^2$



In Exercises 9 and 10, determine whether the statement is *always*, *sometimes*, or *never* true. Explain your reasoning.

9. The graph of $g(x) = ax^2$ is wider than the graph of $f(x) = x^2$ when $a > 0$.

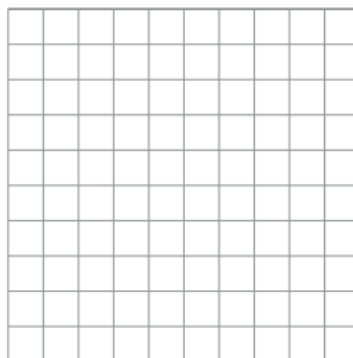
10. The graph of $g(x) = ax^2$ is narrower than the graph of $f(x) = x^2$ when $|a| < 1$.

In Exercises 1–4, graph the function. Compare the graph to the graph of $f(x) = x^2$.

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



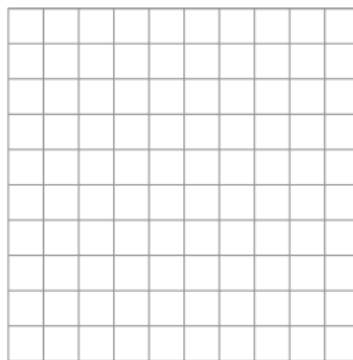
2. $m(x) = x^2 - 3$



3. $n(x) = -3x^2 - 2$



4. $q(x) = \frac{1}{2}x^2 - 4$



Evaluate the expression when $x = -4$.

5. $2x^2 + 8$

6. $-x^2 + 3x - 4$

7. $-3x^2 - 4$

8. $5x^2 - x + 8$

9. $4x^2 - 8x$

10. $6x^2 - 5x + 3$

11. $-2x^2 + 4x + 4$

12. $3x^2 + 2x + 2$