

NAME: \_\_\_\_\_ Score \_\_\_\_\_/10

1. The rule for a linear function is of the form  $f(x) = mx + b$
2. A quadratic function is a function whose rule can be written in the form  $f(x) = ax^2 + bx + c$
3. The x-intercept of the graph of  $2x - 8y = 24$  is **12**.
4. The graph of a function passes the **vertical** line test.
5. If the discriminant of a quadratic function is negative the graph of that function has **no** x-intercepts.
6.  $f(x)$  is an element of the **range** of the function  $f$ .
7. If a point  $(k, p)$  is on the graph of a function  $g$ , then  $p = g(k)$
8. The vertex of the graph of a quadratic function  $f$  is  $\left(\frac{-b}{2a}, f\left(\frac{-b}{2a}\right)\right)$
9. State the formula for the slope of a line through two points  $m = \frac{y_1 - y_2}{x_1 - x_2}$
10. If the leading coefficient of a quadratic function is negative the graph of the function is a parabola which opens **down**