

NAME: _____ Score _____/10

Please **print** your name

1. A real number which is not rational is **irrational**.
2. The graph of a function f consists of all those points and only those points (a, b) for which **$f(a) = b$** .
3. The norm of the complex number $5 - 2i$ is **$5^2 + 2^2 = 29$** .
4. A quadratic equation in one variable is an equation which may be written in the form **$ax^2 + bx + c = 0$** where a , b , and c are real numbers and a is not zero.
5. The vertex of a parabola which is the graph of a quadratic function named g is **$\left(\frac{-b}{2a}, f\left(\frac{-b}{2a}\right)\right)$**
6. The volume of a cone with radius r and height h is **$V = \frac{1}{3}\pi r^2 h$** .
7. The opposite of a complex number $a + bi$ is **$-a - bi$** .
8. A zero of a function f is a domain element k for which **$f(k) = 0$** .
9. A linear function is a function whose rule may be written in the form **$f(x) = mx + b$** where m and b are real numbers.
10. If the leading coefficient of a quadratic function is negative, the graph is a parabola which opens **down**.