

- Two functions that are polynomials
- Two functions that are NOT polynomials

**Reminder:** Given a function  $f(x)$ , coordinate points of the form  $(x, 0)$  on the graph  $f(x)$  are the  $x$ -intercepts, and coordinate points of the form  $(0, f(0))$  on the graph of  $f(x)$  are the  $y$ -intercepts

**Definition:** Given a polynomial  $f(x)$ , the number of times a given term  $(x - c)$  appears in the factored form of  $f(x)$  is called the **multiplicity**