



## Factoring

### About These Problems

Factoring questions usually involve polynomials and solving for the 0 of one. The zero of a polynomial is the value that makes it equal to 0.

Factoring helps us solve for it easily. If  $f(x) = (x-a)(x+b)$  we know the zeros are  $a$  and  $-b$ .

**Question.** Which of the following is a zero of the following polynomial?

$$F(x) = x^2 + 2x + 1$$

1. -1
2. -2
3. -3
4. 2
5. 3

**Answer. 1:** Factoring the equation gives us the following:

$F(x) = (x+1)(x+1)$  From our factoring zero rules we know that -1 is now a 0.