

## Section 2.3 Polynomial Functions- Finding zeros

Find the zeros of each algebraically.

$$1) f(x) = 3x^3 - x^2 - 2x$$

$$2) f(x) = 9x^2 - 3x - 2$$

State the degree and list the zeros of the polynomial function. State the multiplicity of each zero and whether the graph crosses the x-axis at the corresponding x-intercept. Then sketch the graph by hand.

$$3) f(x) = x(x - 3)^2$$

$$4) f(x) = -(x - 1)^3(x + 2)^2$$

5) Using only algebra, Find a cubic function with zeros 3,-4,6