

A2: Finding Zeros of Polynomial Functions WKST 2

Find all zeros using the rational root theorem.

$$1. \quad f(x) = x^3 - 6x^2 + 11x - 6$$

$$2. \quad f(x) = x^3 - 7x^2 + 15x - 9$$

$$3. \quad f(x) = 6x^3 + 11x^2 - 3x - 2$$

$$4. \quad f(x) = 8x^3 - 26x^2 + 3x + 9$$

$$5. \quad f(x) = x^3 + 3x^2 + 3x + 1$$

$$6. \quad f(x) = x^3 + 3x^2 - 25x + 21$$

ANSWERS

$$1. \quad x = 1, 2, 3$$

$$2. \quad x = 1, 3 \text{ mult. 2}$$

$$3. \quad x = -2, -\frac{1}{3}, \frac{1}{2}$$

$$4. \quad x = -\frac{1}{2}, \frac{3}{4}, 3$$

$$5. \quad x = -1 \text{ mult. 3}$$

$$6. \quad x = -7, 1, 3$$