

## Homework - Finding Zeros of Polynomials (2.3)

**YOU MUST SHOW ALL YOUR WORK TO RECEIVE CREDIT!**

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

1) \_\_\_\_\_

2)  $f(x) = x^4 - 5x^2 + 4$

2) \_\_\_\_\_

3)  $f(x) = x^3 + x^2 - 12x$

3) \_\_\_\_\_

4)  $f(x) = x^3 - 6x^2 + 9x$

4) \_\_\_\_\_

5)  $f(x) = x^5 + 9x^6$

5) \_\_\_\_\_

6)  $f(x) = x^3 + 5x^2 - 9x - 45$

6) \_\_\_\_\_

$$7) f(x) = x^3 + 6x^2 - x - 6$$

7) \_\_\_\_\_

$$8) f(x) = -x^4 + 10x^2 - 9$$

8) \_\_\_\_\_

$$9) f(x) = x^4 + 8x^3 + 16x^2$$

9) \_\_\_\_\_

$$10) f(x) = x^3 + 2x^2 - 4x - 8$$

10) \_\_\_\_\_

$$11) f(x) = -45x - 3x^2 + 6x^3$$

11) \_\_\_\_\_

$$12) f(x) = x^3 - 5x^2 + 6x$$

12) \_\_\_\_\_