

Name: _____ Hour: _____ Date: _____

Graphing Polynomials in Standard Form Practice I

For the following polynomials:

- a) State the zeros
- b) Determine any multiplicities
- c) Describe the End Behavior
- d) Graph the function

1) $y = x^4 - 8x^3 + 16x^2$

2) $y = x(x - 8)^2$

3) $y = x^3 - 6x^2 - 16x$

4) $y = (x - 2)(x + 7)^3$

$$5) y = x^3 + 7x^2 + 12x$$

$$6) y = 9x^3 - 81x$$

$$7) y = 3x^3 - 8x^2 + 4x$$

$$8) y = 2x^6 + 3x^5 - 9x^4$$