ALG III 1/16/18 HW: Intro to Graphing Polynomials Name:_____

Factor completely. Sketch a graph including all intercepts.

- 1. $f(x) = 3x^2 11x 4$
- 2. $f(x) = -2x^2 + 5x 3$
- 3. $f(x) = x^3 + 5x^2 4x 20$
- 4. $f(x) = 4x^3 + 16x^2 x 4$
- 5. $f(x) = x^3 12x^2 + 36x$
- 6. $f(x) = 6x^4 33x^3 18x^2$
- 7. $f(x) = x^3 x^2 10x 8$ x + 2 is a factor
- 8. $f(x) = -x^3 + 2x^2 + 11x 12$ x = -2 is a zero.