Translating Polynomials   **Name:** _____

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Follow the web pages below and follow the directions once you are there.

1)   http://www.mathguide.com/cgi-bin/quizmasters2/TP.cgi   2)   http://www.mathguide.com/cgi-bin/quizmasters2/TP.cgi

4)   http://www.mathguide.com/cgi-bin/quizmasters2/TP2.cgi   5)   http://www.mathguide.com/cgi-bin/quizmasters2/TP2.cgi

The problems below will provide you with the characteristics of polynomials. Use the characteristics to graph the polynomials.

7)   The polynomial has two zeros, which are at -2 and 2. It is second degree and the leading coefficient is negative.

8)   The polynomial has three zeros and it is odd degree. One of the zeros is 0. As x → ∞, y → ∞.

9)   The polynomial is 4th degree. It has a line of symmetry at $x = 0$. It has four zeros. Two of the zeros are at 1 and -2. It has two local maxima and one local minimum.

10)   The polynomial is a parabola that has a single vertex at $(4, -5)$. It has two zeros: 1 and 7.

11)   The polynomial has two negative zeros and one positive zero. It has a local maximum at (0,3). It has a local minimum at $(-3, -2)$. As x → −∞, y → ∞.

12)   The polynomial has 5 zeros. It has local maxima at $(-4,3)$, (1,2), and (3,1). It has local minima at: $(-1,1)$ and (2,0). It has an even degree.