When you finish the quiz
turn in any scrap paper used, with your name on it, then take the two sheets on the cart and begin working on the End Behavior Exploration.

The degree of a polynomial is
The largest exponent after it's been expanded.
If it's in Standard Form it will be the first exponent.

The leading coefficient of a polynomial is
The coefficient of the term with the largest exponent after it's been expanded. If it's in Standard Form it will be the first coefficient.

End-Behavior of a polynomial:

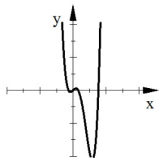
Description of how the FAR left end and the FAR right end of the graph is behaving.

The ends of a polynomial can only do one of two things:
Increase or Decrease

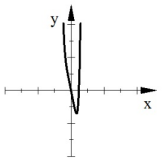
https://www.desmos.com/calculator/hcgom513vz

This is a demonstration of how the degree and leading coefficient changes the shape and end behavior of the graph.

C. $y = 0.5x^4 - 2x^3 + x$

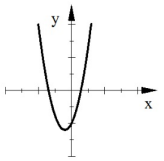


G. $y = 2x^6 - 5x$

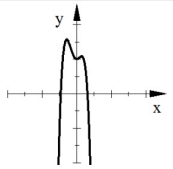


What do these graphs and equations have in common?

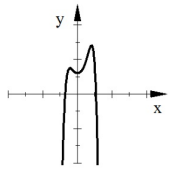
L. $y = x^2 + 2x - 5$



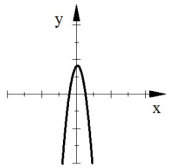
B. $y = -x^4 - x^3 + 2x^2 + 5$



F. $y = -0.1x^6 + 0.2x^5 + x^2 + 3$

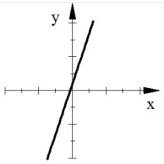


K. $y = -3x^2 + x + 4$

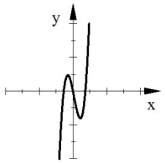


What do these graphs and equations have in common?

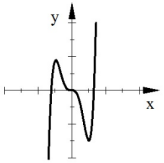
E. $y = 3x + 1$



H. $y = 2x^3 - x^2 - 5x$

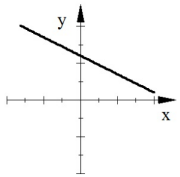


J. $y = 0.1x^5 - x^3 - 0.25x^2$

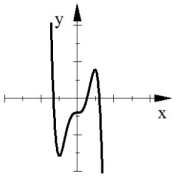


What do these graphs and equations have in common?

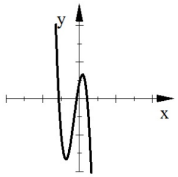
A. $y = -0.5x + 6$



D. $y = -0.1x^5 + x^3 - 2$



I. $y = -2x^3 - 4x^2 + 5x + 2$



What do these graphs and equations have in common?

Hwk #22:
Finish Exploration including Part 3, a summary of how the three member of each group are related with respect to degree, leading coefficient, and end behavior.