



NAME: _____ SCORE: _____



Objectives:

1. Describe graphs of polynomials
2. Interpret the graphs of polynomials



TASKS



Identify the values in the graph that you see in figures 1 and 2. For figure 3, complete the sketch and identify the needed information.

Figure 1. $f(x) = x^6 - 3x^4 + 2x^2$	y-intercept/s: x-intercept/s: left tail behavior: right tail behavior:
Figure 2. $f(x) = x^3 - 5x^2 - x + 5$	y-intercept/s: x-intercept/s: left tail behavior: right tail behavior:
Figure 3. $f(x) = -2(x+3)^2(x-5)$	y-intercept/s: x-intercept/s: left tail behavior: right tail behavior:



Describe the graph by identifying its number of turning points, y-intercepts, x-intercepts, tail behavior, domain, and range.

	Graph 1	Graph 2	Graph 3
	$y = x^4 - 6.5x^3 + 12.5x^2 - 7x$	$y = x^4 - 4x^3 + 5x^2 - 1$	$y = -x^4 + 11x^3 - 44x^2 + 76x - 50$
number of turning points			
y-intercepts			
x-intercepts			
tail behavior			
domain			
range			