WORKSHEET 3 | GRAPHS OF POLYNOMIALS

3

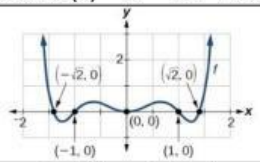
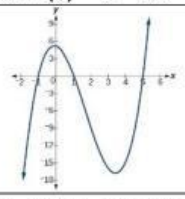
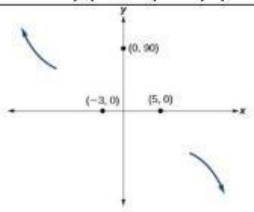
NAME: _____ SCORE: _____

Objectives:

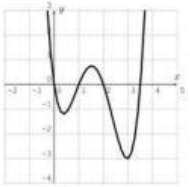
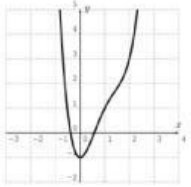
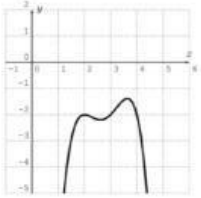
1. Describe graphs of polynomials
2. Interpret the graphs of polynomials

TASKS

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

Figure1. $f(x) = x^6 - 3x^4 + 2x^2$ 	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:
Figure3. $f(x) = -2(x+3)^2(x-5)$ 	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			