Learning Activity 1.1 : Final Practice Questions

Complete the following table based on the given function. Then, review the suggested answers on the next page.

	$y = -2x^4$	$f(x) = -x^2 + 4x^3 + x$	$g(x) = 3(x+2)(x-2) + 12$	$y = -\frac{1}{3}x$
Degree of Function				
Type of Polynomial Function				
Leading Coefficient				
Domain				
Range				
End Behaviour				

Suggested Answers

Use the following table to check your answers on page 1.

	$y = -2x^4$	$f(x) = -x^2 + 4x^3 + x$	$g(x) = 3(x + 2)(x - 2) + 12$	$y = -\frac{1}{3}x$
Degree of Function	4	3 You will have to write the terms in descending order of the exponents $f(x) = 4x^3 - x^2 + x$	2 You will have to expand and simplify the equation first $g(x) = 3(x + 2)(x - 2) + 12$ $= 3(x^2 + 2x - 2x - 4) + 12$ $= 3(x^2 - 4) + 12$ $= 3x^2 - 12 + 12$ $= 3x^2$	1
Type of Polynomial Function	Quartic	Cubic	Quadratic	Linear
Leading Coefficient	-2	4 Remember to look at the equation in the proper order $f(x) = 4x^3 - x^2 + x$	3 Remember to look at the equation after you have expanded and simplified $g(x) = 3(x + 2)(x - 2) + 12$ $= 3(x^2 + 2x - 2x - 4) + 12$ $= 3(x^2 - 4) + 12$ $= 3x^2 - 12 + 12$ $= 3x^2$	$-\frac{1}{3}$
Domain	$\{x \in R\}$	$\{x \in R\}$	$\{x \in R\}$	$\{x \in R\}$
Range	$\{y \in R \mid y \leq 0\}$	$\{y \in R\}$	$\{y \in R \mid y \geq 0\}$	$\{y \in R\}$
End Behaviour	Starts **low** Ends **low**	Starts **low** Ends **high**	Starts **high** Ends **high**	Starts **high** Ends **low**