

# Algebra 2: Functions, Polynomials, Rationals

Section	Key Problem	You Got It Right!	Notes	HMWK Done	Correct on Homework.	I Got This!
F1: Function Notation	For the function $f(x) = 2x + 8$ , find: a) The Domain b) The Range c) $f(3)$				/14	
F2: Families of Functions	The given number is which number in the given sequence? -41; $a_n = 4 - 3(n - 1)$				X	
F3: Transformations of Functions	State how the function $f(x) = -3(x - 2)^2$ is transformed from the function $f(x) = x^2$ .				/11	
F4: Polynomials	Simplify $(x + 2)(3x - 6)$ , and state the degree of the RESULTING polynomial.				/14	
F4.5 Composition	If $f(x) = 2x + 7$ and $g(x) = x^2 - 4$ , find $(f \circ g)(x)$				/10	
Composition Story Problem		<b>X</b>	<b>X</b>			
Quiz: F1, F2, F3, F4		Score 1:	x-tra		Score 2:	
F5: Dividing Polynomials	Use long division: $\frac{x^2 - 5x - 6}{x + 1}$				/8	

F5.5: Dividing Polynomials	Use long division: $\frac{x^3-2x^2-11x+12}{x-4}$					/7
F6: Graphing Polynomials	For the quadratic function, $y = -x^2 + 2x + 1$ , Find a) the y-intercept, b) the x-intercepts, c) the max or min d) whether the graph goes up or down.					/14
F7: Zeros of Polynomials	Given the polynomial $(x) = 3x^2 - 12x^2 + 3x + 18$ , which values of x are NOT zeros of the polynomial: -1, 0, 1?					/8
Quiz: F5, F6, F7		Score 1:	x-tra		Score 2:	
F8: Rational Functions	State any vertical asymptote(s) and horizontal asymptotes of the function: $f(x) = \frac{3x^2 - 2x + 4}{x^2 - 9}$					/8
F9: More Rational Functions	State any vertical asymptote(s), horizontal , or slant asymptotes or holes of the function: $f(x) = \frac{x - 3}{x^2 - 9}$					
Review						/20
Test					Score:	