

Linear Functions

Catholic Identity Standards (Ways to Grow)		Notes	Check Up		
Living our Faith	☐ I can connect what I learn to my faith.*				
	☐ I can apply what I learn in my daily life.*				

Learning Process Standards (Tools to Know)		Notes	Check Up		
Applying Math in Everyday Situations	☐ I can determine what math I need to use to solve a problem. A.2A				
Using Problem Solving Models	☐ I can use a problem-solving model to solve a problem. A.2B				
	☐ I like when I can solve difficult problems.* A.2C				

Content		Notes	Check Up		
Solving Linear Equations	☐ I can solve equations such as: $3(c - 4) + 8 = 2(2c + 1) - 9$ A.3C				
	☐ I can find x and y values in problems about direct variation. A.3C.1				
	☐ I can represent formulas in more than one way. A.3C.2				
Writing Linear Equations	☐ I can write a linear equation from a table of x and y values. A.3B				
	☐ I can write a linear equation from a graph. A.3B				
	☐ I can write a linear equation from a verbal description. A.3B				
	☐ I can write the equation for a line when given the slope and one point. A.3B.1				
	☐ I can write the equation for a line when given two points. A.3B.1				
	☐ I can write the equation for a line that is parallel to another one. A.3B.2				
	☐ I can write the equation for a line that is perpendicular to another one. A.3B.3				
	☐ I can identify a zero and undefined slope. A.3B.4				

(continued)

Linear Functions (continued)

Content		Notes	Check Up		
Writing Linear Equations (continued)	☐ I can determine the slope of a line when given a table. A.3B.5				
	☐ I can determine the slope of a line when given a graph. A.3B.5				
	☐ I can determine the slope of a line when given coordinates for two points. A.3B.5				
	☐ I can determine the slope of a line when given an equation. A.3B.5				
	☐ I can write a formula to find any term in an arithmetic sequence. A.3B.6				
Describing Linear Functions	☐ I can describe the domain and range of a linear function using sets. A.3A.1				
	☐ I can describe the domain and range of a linear function using inequalities. A.3A.1				
	☐ I can look at the graph of a line and identify the slope, y-intercept, and x-intercept. A.3A				
	☐ I can describe what happens to the graph of the line $y = x$ when you change it to $y = 2x$ or $y = x + 2$. A.3A.2				
	☐ I can enter x and y data into a calculator and use it to calculate a correlation coefficient. A.3A.3				
	☐ I can find values when given a function notation. A.3A.4				

Process: Ways to Show		Notes	Check Up		
Creating/Using Representations	☐ I can create a representation of my math solution and explain it to another person. A.2D				
Analyzing Information	☐ I can describe and connect math ideas. A.2E				
	☐ I can ask questions to figure out if something is true or false.* A.2F				

Systems of Equations and Inequalities

Catholic Identity Standards (Ways to Grow)		Notes	Check Up		
Living our Faith	☐ I can connect what I learn to my faith.*				
	☐ I can apply what I learn in my daily life.*				

Learning Process Standards (Tools to Know)		Notes	Check Up		
Applying Math in Everyday Situations	☐ I can determine what math I need to use to solve a problem. A.2A				
Using Problem Solving Models	☐ I can use a problem-solving model to solve a problem. A.2B				
	☐ I like when I can solve difficult problems.* A.2C				

Content		Notes	Check Up		
Systems of Equations	☐ I can write a system of two linear equations from a graph. A.4A.1				
	☐ I can write a system of two equations from a verbal description. A.4A.1				
	☐ I can solve a system of two linear equations. A.4A				
	☐ I can graph two lines on the same grid and identify their point of intersection as the solution to a system of equations. A.4A.2				
Inequalities	☐ I can sketch the graph of a linear inequality. A.4B				
	☐ I can write a linear inequality from a graph. A.4B.1				
	☐ I can write a linear inequality from a verbal description. A.4B.1				
	☐ I can solve inequalities such as: $-3(c - 4) + 8 \leq 2.5(2c + 1) - 9$ A.4B.2				

Process: Ways to Show		Notes	Check Up		
Creating/Using Representations	☐ I can create a representation of my math solution and explain it to another person. A.2D				
Analyzing Information	☐ I can describe and connect math ideas. A.2E				
	☐ I can ask questions to figure out if something is true or false.* A.2F				

Simplifying Expressions

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Living our Faith	☐ I can connect what I learn to my faith.*				
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Process: Tools to Know		Notes	Check Up		
Applying Math in Everyday Situations	☐ I can determine what math I need to use to solve a problem. A.2A				
Using Problem Solving Models	☐ I can use a problem-solving model to solve a problem. A.2B				
	☐ I like when I can solve difficult problems.* A.2C				

Content		Notes	Check Up		
Polynomials	☐ I can factor trinomials. A.5A				
	☐ I can add and subtract two polynomials. A.5A.1				
	☐ I can multiply polynomials. A.5A.2				
	☐ I can divide two polynomials. A.5A.3				
	☐ I can use the distributive property to rewrite a polynomial expression. A.5A.4				
	☐ I can identify and factor polynomials written as the difference of two squares. A.5A.5				
Radicals	☐ I can simplify expressions with rational exponents. A.5B				
	☐ I can simplify radicals. A.5B.1				

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Creating/Using Representations	☐ I can create a representation of my math solution and explain it to another person. A.2D				
Analyzing Information	☐ I can describe and connect math ideas. A.2E				
	☐ I can ask questions to figure out if something is true or false.* A.2F				

Quadratic Functions

Catholic Identity Standards (Ways to Grow)		Notes	Check Up		
Living our Faith	☐ I can connect what I learn to my faith.*				
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Process: Tools to Know		Notes	Check Up		
Applying Math in Everyday Situations	☐ I can determine what math I need to use to solve a problem. A.2A				
Using Problem Solving Models	☐ I can use a problem-solving model to solve a problem. A.2B				
	☐ I like when I can solve difficult problems.* A.2C				

Content		Notes	Check Up		
Writing and Solving Quadratic Equations	☐ I can solve quadratic equations by factoring. A.6B				
	☐ I can solve quadratic equations by completing the square. A.6B				
	☐ I can solve quadratic equations by taking square roots. A.6B				
	☐ I can solve quadratic equations using the quadratic formula. A.6B				
	☐ I can use the vertex and other points from a quadratic function to write its equation in the form $f(x) = a(x - h)^2 + k$. A.6B.1				
	☐ I can rewrite a quadratic equation from vertex form to standard form. A.6B.1				
	☐ I can use the factors of a quadratic function to find the zeros. A.6B.2				
	☐ I can write the factors of the function from the zeros. A.6B.2				
	☐ I can enter x and y data into a calculator and determine the quadratic function that best fits the data. A.6B.3				

Quadratic Functions (continued)

Describing Quadratic Functions	☐ I can describe the domain and range of a quadratic function using inequalities. A.6A.1			
	☐ I can plot the graph of a quadratic function and identify the graph's y-intercept, x-intercept(s), vertex, and axis of symmetry. A.6A			
	☐ I can describe what happens to the graph of $f(x) = x^2$ when you change it to $f(x) = 2x^2$, $f(x) = x^2 + 2$, or $f(x) = (x + 2)^2$. A.6A.2			
	☐ I can find values when given a function notation. A.6A.3			

Process: Ways to Show		Notes	Check Up		
Creating/Using Representations	☐ I can create a representation of my math solution and explain it to another person. A.2D				
Analyzing Information	☐ I can describe and connect math ideas. A.2E				
	☐ I can ask questions to figure out if something is true or false.* A.2F				

Exponential Functions

Catholic Identity Standards (Ways to Grow)		Notes	Check Up		
Living our Faith	☐ I can connect what I learn to my faith.*				
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Process: Tools to Know		Notes	Check Up		
Applying Math in Everyday Situations	☐ I can determine what math I need to use to solve a problem. A.2A				
Using Problem Solving Models	☐ I can use a problem-solving model to solve a problem. A.2B				
	☐ I like when I can solve difficult problems.* A.2C				

Content		Notes	Check Up		
Writing Exponential Functions	☐ I can write exponential functions based on real-world situations. A.7B				
	☐ I can enter x and y data into a calculator and determine an exponential function that best fits the data. A.7B.1				
	☐ I can find the pattern between the terms of a sequence and use it to find other terms. A.7B.2				
	☐ I can write a formula to find any term in a geometric sequence. A.7B.3				
Describing Exponential Functions	☐ I can plot the graph of an exponential function and identify the graph's y -intercept and asymptote. A.7A				
	☐ I can describe the domain and range of an exponential function using inequalities. A.7A.1				
	☐ I can explain how the numbers (a and b) in an exponential function ($f(x) = ab^x$) affect its table and graph. A.7A.2				
	☐ I can tell when a relationship is a function when given a table, graph, or equation. A.7A.3				

Exponential Functions (continued)

Process: Ways to Show		Notes	Check Up		
Creating/Using Representations	☐ I can create a representation of my math solution and explain it to another person. A.2D				
Analyzing Information	☐ I can describe and connect math ideas. A.2E				
	☐ I can ask questions to figure out if something is true or false.* A.2F				