

Ready, Set, Go Mission Possible



SENIOR HIGH

Curriculum and Instruction
Division of Mathematics, Science, & Advanced Academic Programs

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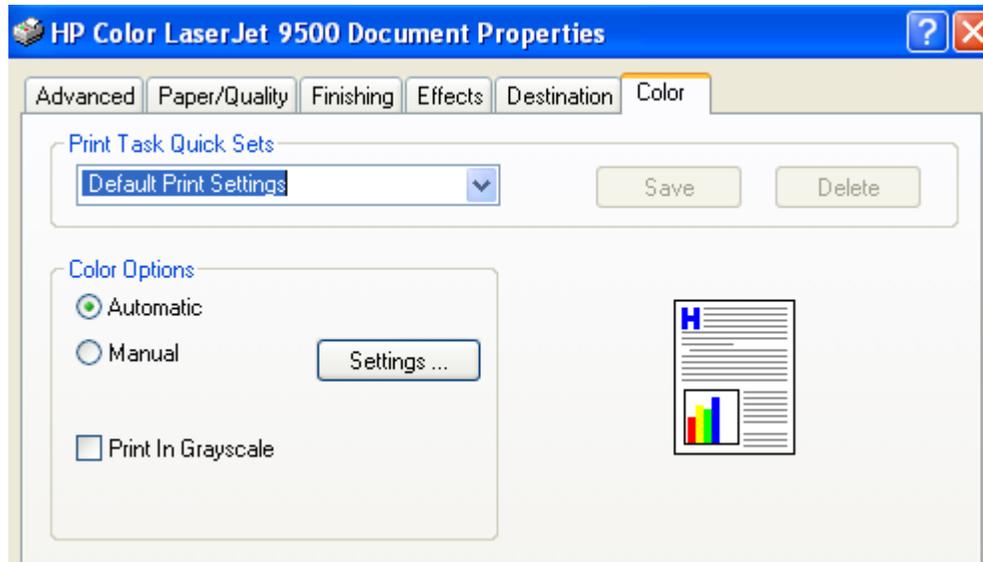
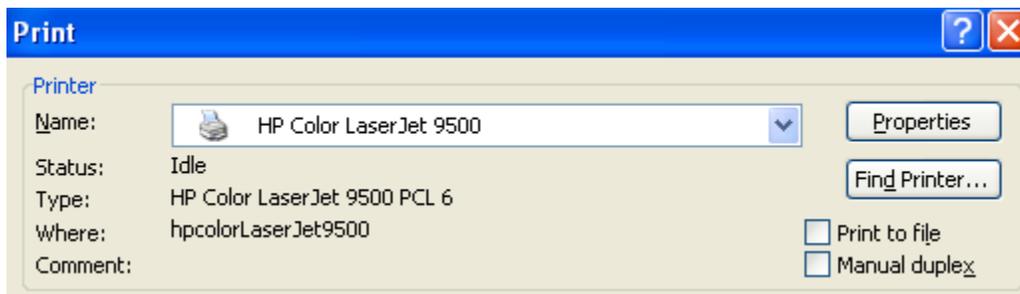
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Division of Mathematics, Science, and Advanced Academic Program

Welcome to the Miami-Dade County Public School's Summer Fun packets. These fun activities are designed to help promote learning throughout the summer break. The activities are divided by grade levels and curriculum content – Social Studies, Science, Mathematics, and Reading/Language Arts. Educational web-links are also included with all packets. Please be sure to supervise your child while they are using the internet.

In addition to the fun packets, it is strongly recommended that you encourage you child to continue to read at least 30 minutes each day. Support for reading includes: Barnes & Nobles' *Summer Reading Journal* <http://bn.com/summerreading> and Miami-Dade Public Library's *Wild About Reading Summer Reading Adventure* <http://www.mdpls.org>. In addition, *Ticket to Read* is available through the Student Portal: <http://www.dadeschools.net/students/students.htm>.

In an attempt to conserve paper and ink, if you wish to print these activities, they are combined using a little space as possible and no color except for the links on this page and this note. If you wish to avoid printing in color, please select "Print in grayscale" on your printer's properties/color tab located on the "Print" screen. See the figures below.



TITLE: A High Definition (HD) TV DILEMMA

DESCRIPTION:

The Federal Communication Commission (FCC) has designated that February 17, 2009, will signal the end of all full-power television stations' analog broadcast signals. That means everyone in the United States will only receive over the air transmission of digital signals. With the latest televisions, consumers will have the ability to receive High Definition (HD) signals that are crystal clear along with 5.1 Dolby Digital stereo surround sound.

From cable or satellite provider, consumers can receive over 100 basic digital channels* and some HD-TV channels (without premium movie channels, HBO, MAX) for less than \$80 per month. For just over \$100 per month, consumers can get an upgraded package with HD-TV broadcasts including premium movie channels (HBO, MAX, etc.).

With all these options, which of the providers (cable or satellite) offers the best package?

Create a table to record and compare the packages (include: name of providers, number of digital channels, number of HD channels, and cost)

Through the Internet or by telephone, research the various packages

- Which provider has the best package for less than \$80?
- Which provider has the best package greater than \$100?
- Which provider has the best package greater than \$80 but less than \$100?
- Which package would make the most sense for your family and why?

***NOTE: Not all digital signals are high definition. In fact, HDTV is just ONE of 18 formats that comprise the ATSC Digital TV Standard.**

Subject	Body of Knowledge Standard(s)	Your Mission
Algebra I	<p>Algebra MA.912.A.3.11: Write an equation of a line that models a data set, and use the equation or the graph to make predictions. Describe the slope of the line in terms of the data, recognizing that the slope is the rate of change.</p>	<ol style="list-style-type: none"> 1. Create a table to record and compare the packages; Title the columns "Provider Name", "Number of Digital Channels", "Number of HD Channels", and "Cost". (Optional: Use a spreadsheet) 2. Make a histogram of "Number of Digital Channels" versus "Provider Name". 3. Make a histogram of "Number of HD Channels" versus "Provider Name". 4. Create a graph of "Cost" versus "Number of Digital Channels". Determine a line of best fit. Is the slope of the line positive or negative? Defend your answer. 5. Create a graph of "Cost" versus "Number of HD Channels". Determine a line of best fit. Is the slope of the line positive or negative? Defend your answer. 6. Optional: Using a spreadsheet (e.g. Excel), create the histograms and graphs listed above.

Subject	Body of Knowledge Standard(s)	Your Mission
Geometry	<p>Discrete Mathematics MA.912.D.6.2: Find the converse, inverse, and contra-positive of a statement</p>	<ol style="list-style-type: none"> 1. Create a table to record and compare the packages; Title the columns "Provider Name", "Number of Digital Channels", "Number of HD Channels", and "Cost". (Optional: Use a spreadsheet) 2. Determine the inverse, converse, and contra-positive of the statement: "If I pay more money, I will receive more digital channels." Determine which, if any, of them are true. Justify your answer. 3. Determine the inverse, converse, and contra-positive of the statement: "If I receive more digital channels, then I will also receive more HD channels." Determine which, if any, of them are true. Justify your answer.
Algebra II	<p>Algebra MA.912.A.4.10: Use polynomial equations to solve real-world problems.</p> <p>Algebra MA.912.A.4.5: Graph polynomial functions with and without technology and describe end behavior.</p>	<ol style="list-style-type: none"> 1. Create a table to record and compare the packages; Title the columns "Provider Name", "Number of Digital Channels", "Number of HD Channels", and "Cost". (Optional: Use a spreadsheet) 2. Create a graph of "Cost" versus "Number of Digital Channels". Using technology, perform a linear regression, a quadratic regression, a cubic regression, etc. Which result models the data best? How do you know? Justify your work. 3. Create a graph of "Cost" versus "Number of HD Channels". Perform a linear regression, a quadratic regression, a cubic regression, etc. Which result models the data best? How do you know? Justify your work. 4. Research new providers. Determine how much each new provider <u>should charge based on your regression models</u>. Does this help to make wise consumer choices? Why or why not?

TITLE: What’s the Volume?

DESCRIPTION:

A cylinder is a surface generated by a family of all lines parallel to a given line (the generatrix) and passing through a curve in a plane (the directrix). A right section is the curve formed by the intersection of the surface and a plane perpendicular to the generatrix. The parallel bases of a cylinder may form any angle with the axis.

More commonly, a cylinder includes the solid enclosed by a cylinder and two parallel planes. The region of either of the parallel planes enclosed by the surface is called a base of the cylinder. The perpendicular distance between the planes of the bases is the height of the cylinder. The line segment cut on any of the generating lines by the two parallel planes is called a lateral edge.

A right circular cylinder in which the axis is perpendicular to the bases. (If the axis of a circular cylinder is not perpendicular to the bases, it is called an oblique circular cylinder.) From the roll of toilet papers in the bathroom to the roll of paper towel in the kitchen or the can of coffee in the kitchen cupboard, right circular cylinders can be found almost anywhere in the home. The volume of right circular cylinder can be found by using the formula:

$$V = \pi r^2 h$$

Activity:

- I. Gather the following materials:
 - a. Ten or more cylindrical objects of different sizes (cups, potato chips containers, tin cans, etc.) that might be found in the kitchen cupboard or around the house.
 - b. String
 - c. Measuring tools (tape measure, rulers, etc.)
 - d. Calculator

- II. Measure and record the following dimensions for each object (round your answers to the nearest tenth):
 - a. Diameter of the base
 - b. Circumference of the base (wrap the string around the base and then measure the length of the string)
 - c. Height of the object

Subject	Body of Knowledge Standard(s)	Your Mission
Algebra I	Algebra MA.912.A.3.11: Write the equation of a line that models a data set, and use the equation or the graph to make predictions. Describe the slope of the line in terms of the data, recognizing that the slope is the rate of change.	<ol style="list-style-type: none">1. Calculate the radius of each object.2. Create a table of values (radius, circumference)3. Plot these ordered pairs.4. Describe the relationship between the data points. Is there a positive correlation? Is the data linear, quadratic, or cubic5. Write an equation that models this data.6. Identify the rate-of-change and describe the real-world meaning of this value.7. Identify the <i>y-intercept</i> and describe the real-world meaning of this value.

Subject	Body of Knowledge Standard(s)	Your Mission
Geometry	<p>Geometry MA.912.G.7.5: Explain and use formulas for lateral area, surface area, and volume of solids.</p>	<ol style="list-style-type: none"> 1. Calculate and record the volumes of each object. 2. Compare the volumes that you have recorded. Are there any two objects that have similar volumes but different shapes? 3. Compare your calculated volume to the volume printed on the label of each object measured. Was your measurement close to the printed volume? 4. The grocer would like to store more items on the existing shelves at the grocery store. He thinks he would like to stack two cylinders in place of one. He wants to keep the volume of each cylinder the same but change the size so that he can store more items on the existing shelf. Each shelf currently holds 10 of your cylinders. Help the company redesign their cylinder so that they make the grocer happy. Pick one of your cylinders and redesign this cylinder so that the volume remains the same but the height is one-half of the original height. Describe your new cylinder, construct a sample cylinder, and verify in writing that the volume of your new cylinder is the same as the volume of the original cylinder. Will the two cylinders fit on the shelf if they are stacked one on top of another? Justify your solution.
Algebra II	<p>Algebra MA.912.A.4.7: Write a polynomial equation for a given set of real and/or complex roots</p>	<ol style="list-style-type: none"> 1. Calculate the area of the base of each object. 2. Calculate the volume of each object 3. Create a table of values (area, volume) 4. Plot these ordered pairs. 5. Describe the relationship between the data points. Is there a positive correlation? Is the data linear, quadratic, or cubic? 6. Write an equation that models this data. 7. Determine the roots of this equation. What do these values represent? 8. Describe the relationship between the area of the base and the volume of the cylinder.

TITLE: Show Me the Text

DESCRIPTION:

Text messaging, or texting is the common term for the sending of "short" (160 characters or fewer, including spaces) text messages from mobile phones using the Short Message Service (SMS). It is available on most digital mobile phones and some personal digital assistants with on-board wireless telecommunications. The individual messages which are sent are called text messages, or in the more colloquial text speak texts.

SMS gateways exist to connect mobile SMS services with instant message (IM) services, the world wide web, desktop computers, and even landline telephones (through speech synthesis). Devices which can connect to mobile phones and PDAs through protocols such as Bluetooth can also sometimes use that link to send SMS messages over the wireless network. SMS arose as part of the widely deployed GSM protocol, but is now also available with non-GSM systems.

The most common application of the service is person-to-person messaging, but text messages are also often used to interact with automated systems, such as ordering products and services for mobile phones, or participating in contests. There are some services available on the Internet that allows users to send text messages free of direct charge to the sender.

Through the Internet or by telephone, research the various text messaging packages and cell services from four of the national cell service providers.

- Which provider has the best individual plan for text messaging?
- Which provider has the best family plan for text messaging?
- Which provider has the best pre-paid plan for text messaging?
- Which package would make the most sense for you and why?

Optional: Use a spreadsheet to create, print, and record the packages.

Jumanji City Cell Plans

Cap Wireless	Trade Mobile	Ying Wireless	Yang Mobile
<ul style="list-style-type: none"> • Cell Phone costs: \$200 – replaced with updated version every year for free • General Taxes and Connection Services: \$20 • Unlimited Calls, Text Messaging for \$110/month 	<ul style="list-style-type: none"> • Cell Phone costs: \$100 – replaced with updated version every 2 years for free • General Taxes and Connection Services: \$40 • Calls cost \$.10/minute each month • Each text message (sent and received) costs \$.05 	<ul style="list-style-type: none"> • Cell Phone costs: \$100 - replaced with updated version every 2 years for free • General Taxes and Connection Services: \$40 • Calls cost: \$.06/minute each month • Each text message (sent and received) costs \$.25 	<ul style="list-style-type: none"> • Cell Phone costs: \$80 – replaced with updated version every 3 years for free • General Taxes and Connection Services: \$20 • Calls are free for the first 60 minutes – then they are \$.50/minute • The first 15 text messages (sent and received) are free and then they cost \$.50/message • Any minutes or texts under the free amount are not credited to the account

Subject	Body of Knowledge Standard(s)	Your Mission
Algebra I	<p>Algebra MA.912.A.3.5: Symbolically represent and solve multi-step and real-world applications that involve linear equations and inequalities.</p>	<p>Create an algebraic expression for each of the monthly costs for the four carriers in Jumanji City (disregard the cost of the Cell Phone).</p>
Geometry	<p>Geometry MA.912.G.8.2: Use a variety of problem-solving strategies, such as drawing a diagram, making a chart, guess-and-check, solving a simpler problem, writing an equation, and working backwards.</p>	<p>Assume a 30-day billing cycle.</p> <ul style="list-style-type: none"> • Customer A averages 4 text messages and 10 minutes of calls a day. • Customer B averages 5 text messages and 30 minutes of calls a day. • Customer C averages 1 text message every other day and 4 minutes of calls a day. • Customer D averages 2 text messages and 20 minutes of calls a day. <p>Create a table for the each of the four carriers in Jumanji City has the worst plan. Justify your answer.</p>
Algebra II	<p>Algebra MA.912.A.3.15: Solve real-world problems involving systems of linear equations and inequalities in two and three variables.</p>	<p>Use a system of equations to determine which of the four carriers in Jumanji City has the most economical plan. Justify your answer.</p>

TITLE: The Geometry of Crop Circles

Reprinted from *CoolMath*

DESCRIPTION:

Whether you think crop circles are made by little green men from space or by sneaky earthling geeks, you've got to admit that they are pretty cool. Whoever is making these circles knows a great deal of mathematics, especially geometry!

What is a crop circle? A crop circle is a sizable pattern created by the flattening of a crop such as wheat, barley, rye, or maize. In 1991, self-professed pranksters Doug Bower and Dave Chorley stated that they had started the phenomenon in 1978 by making actual circles on crops with the use of simple tools. However, crop patterns did not only persist but became astonishingly complex. Some even came to resemble extraterrestrials, fractals, and archaeological, religious or mythological symbols, leading to speculation and passionate debate. These crop circles sometimes cover an area of 200,000 square feet!

No matter how they got started, crop circles have generated a great deal of interest. There are even groups of artists who freely take credit for creating them. Others are thought to have done them, but will never admit it. Part of the fun of crop circles is the mystery of wondering who made them and how they made them. They always seem to appear overnight. The next morning, the crop circles are there, completely finished!

See the following URL for pictures of crop circles:

<http://www.independent.co.uk/news/uk/this-britain/crop-circle-season-arrives-with-a-mathematical-message-1982647.html>

<http://www.coolmath.com/geometry-of-crop-circles.html>

http://www.cropcircles.org/Circle_Research_Tours/Welcome.html

Subject	Body of Knowledge Standard(s)	Your Mission
Algebra I	Algebra MA.912.A.3.11 Write an equation of a line that models a data set and use the equation or the graph to make predictions. Describe the slope of the line in terms of the data, recognizing that the slope is the rate of change.	Utilizing a diagram of the crop circle on the site(s) provided, <ul style="list-style-type: none">• Overlay the crop circle picture with a 1 cm graph• Trace any line that appears in the picture• Write the equation for any line in each diagram• Use a graphing calculator to check your equations• Write a description of the process you used to determine the equation of the line(s). Include diagrams, a table of values, and all mathematical work
Geometry	Geometry MA.912.G.6.5 Solve real-world problems using measures of circumference, arc length,	You can make your own crop circles. All you need is some rope and a short board to press the grain in the field down. Design a plan that explains how you would go about constructing a crop circle. Create a visual presentation board (or podcast)

Subject	Body of Knowledge Standard(s)	Your Mission
	and areas of circles and sectors.	<p>that includes:</p> <ul style="list-style-type: none"> • a diagram of your crop circles constructed to scale • the construction used to create the diagram • the area required to create the crop circle • the mathematics behind the scale diagram and the actual diagram • Use Geometer's Sketchpad or GeoGebra in your presentation
Algebra II	<p>Geometry MA.912.G.6.7 Given the equation of a circle in the center-radius form or given the center and the radius of a circle, sketch the graph of the circle.</p>	<p>Utilizing a diagram of the crop circle on the site(s) provided,</p> <ul style="list-style-type: none"> • Overlay the crop circle picture with a 1 cm graph • Trace any circle that appears in the picture • Write the equation for any circle in each diagram; Identify the center and radius for each circle • Use a graphing calculator to check your equations • Write a description of the process you used to determine the equation of the line(s). Include diagrams, a table of values, and all mathematical work

TITLE: Wherever you go, there you are!

DESCRIPTION:

Have you ever noticed all the “slope” signs all over the roads and highways? There are many signs like the one shown below:



This sign means that there is a speed limit of 30 MPH or 30 miles per hour. The reason that the speed limit sign is an example of slope is that speed (or rate) is a ratio of a change in distance (s or d) divided by a change in time (t). Written as a formula,

$$\text{rate} = \frac{\text{change of distance}}{\text{change of time}} = \frac{s_2 - s_1}{t_2 - t_1} = \frac{\Delta s}{\Delta t}$$

which is directly analogous to the definition of slope:

$$\text{slope} = \frac{\text{change of } y}{\text{change of } x} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{\Delta y}{\Delta x}$$

Multiplying the rate equation above by time produces the very familiar formula

$$\text{rate} \times \text{time} = \text{distance} \quad \text{or} \quad r \times t = d$$

Look at the two scenarios below. Use them to explore the rate, time, distance relationships. Using multiple representations of mathematics, such as tables of values and graphs, answer the questions that follow:

Scenario #1

You are driving along at a constant speed of 30 miles per hour. How far will you go in 1 hour? . . . 2 hours? . . . 3 hours? . . . 4 hours? . . . 10 hours? . . . 20 hours?

Scenario #2

How long would it take you to go from Miami to Tallahassee (500 miles) if you walked at 2 miles per hour? . . . ran at 4 miles per hour? . . . biked at 10 miles per hour? . . . drove at 50 miles per hour? . . . flew at 500 miles per hour?

Subject	Body of Knowledge Standard(s)	Your Mission
Algebra I	<p>Algebra MA.912.A.2.13 Solve real-world problems involving relations and functions.</p> <p>Algebra MA.912.A.3.11 Write an equation of a line that models a data set, and use the equation or the graph to make predictions. Describe the slope of the line in terms of the data, recognizing that the slope is the rate of change.</p>	<ol style="list-style-type: none"> Using scenario #1, create a table of values with two columns: time and distance. Graph the data and determine the slope of a line of best fit. What is the significance of the slope? Should the line pass through the origin? Defend your answer. Using scenario #2, create a table of values with two columns: rate and time. Graph the data. Does this look like the graph from scenario #1? Why or why not?
Geometry	<p>Geometry MA.912.G.2.7 Determine how changes in dimensions affect the perimeter and area of common geometric figures.</p> <p>Trigonometry MA.912.T.2.1 Define and use the trigonometric ratios (sine, cosine, tangent, cotangent, secant, cosecant) in terms of angles of right triangles.</p>	<ol style="list-style-type: none"> Using both scenarios, create appropriate tables of values and graphs. What happens to the area of a rectangle when you double the length? Why? In scenario #1, what happens to the distance when you double the time? Why? In scenario #1, what happens to the distance when you triple the time? Why? In scenario #1, what happens to the distance when you halve the time? Why? In scenario #2, what happens to the time when you double the rate? Why? In scenario #2, what happens to the time when you multiply the rate by five? Why?
Algebra II	<p>Algebra MA.912.A.2.12 Solve problems using direct, inverse, and joint variations.</p>	<ol style="list-style-type: none"> Using both scenarios, create appropriate tables of values and graphs. Determine which graph is direct variation and which graph is inverse variation. Justify your answers. Can you tell which scenario is direct variation and which is inverse variation simply by looking at the data? How? In calculus, we discuss something called "limit theory". Imagine you could travel at 1 billion miles per hour. How long would it take you to get to Tallahassee? What are the implications of this situation? Discuss. How long would it a snail to travel from Miami to Tallahassee if he slithered 2 inches per minute? What are the implications of this situation? Discuss.

TITLE: Make the Switch

Reprinted from Florida Power and Light

DESCRIPTION:

If every American home replaced just one light bulb with a fluorescent bulb, we would save enough energy to light more than 3 million homes for a year, more than \$600 million in annual energy costs, and prevent greenhouse gases equivalent to the emissions of more than 800,000 cars.

A compact fluorescent lamp (CFL), also known as a compact fluorescent light bulb (or less commonly as a compact fluorescent tube [CFT]) is a type of fluorescent lamp. Many CFLs are designed to replace an incandescent lamp and can fit in the existing light fixtures formerly used for incandescents.

Compared to general service incandescent lamps giving the same amount of visible light, CFLs use less power and have a longer rated life. In the United States, a CFL can save over \$30 in electricity costs over the lamp's lifetime compared to an incandescent lamp and save 2000 times its own weight in greenhouse gases. The purchase price of a CFL is higher than that of an incandescent lamp of the same luminous output, but this cost is recovered in energy savings and replacement costs over the bulb's lifetime.

Compact fluorescent light bulbs are a *great* way to save energy in your home. They cost more to buy but quickly return that money through lower monthly utility bills. Use this calculator to see how much your family might save by replacing standard 100-watt light bulbs with new compact fluorescents. In addition to these savings on utility bills, compact fluorescents last almost 10 times longer than standard incandescent lamps and give off one-quarter as much heat.

Activity:

From the left menu bar at the FPL website (<http://www.fplforkids.com/>) click on "Energy Efficiency". From the sub menu click on the "Light Switch Calculator" to use the slide bars to make some comparisons.

- If you have five 100-watt light bulbs and they burn about 5 hours per day, at 8 cent/kWh, how much do they cost?
- How much would it have cost if your home had compact fluorescent lamps?
- What is the difference each month between the cost to operate the standard bulb and the compact fluorescent?
- If a candy bar costs 50 cents, how many candy bars could you buy with the savings?
- How many 50-cent candy bars could you buy with the savings over a year?
- If the compact fluorescent bulb costs \$6, how many months would it take to save enough to buy one?
- How many could you buy with your yearly savings?

Subject	Body of Knowledge Standard(s)	Your Mission
Algebra I	Algebra MA.912.A.3.11: Write an equation of a line that models a data set, and use the equation or the graph to make predictions. Describe the slope of the line in terms of the data, recognizing that the slope is the rate of change.	Use FPL's "Light Switch Calculator" to complete Table 1. Write an equation for incandescent bulbs. Write an equation for fluorescent lamps. What does the slope of each represent? Use your equations to predict the cost of 15 hours of use for both incandescent bulbs and fluorescent lamps. What is the difference in the costs?
Geometry	Geometry MA.912.G.8.2: Use a variety of problem-solving strategies, such as drawing a diagram, making a chart, guess-and-check, solving a simpler problem, writing an equation, and working backwards.	Use FPL's "Light Switch Calculator" to complete Table 1 and then plot the coordinates for both incandescent bulbs and fluorescent lamps. From the scatter plot, what is impact as the hours increase? If the numbers of incandescent bulbs and fluorescent lamps were equally decreased from 5 each, would it change the impact as the hours increased?
Algebra II	Algebra MA.912.A.4.9: Use graphing technology to find approximate solutions for polynomial equations.	Use FPL's "Light Switch Calculator" to complete Table 1. Use the tools of a graphing calculator: <ul style="list-style-type: none"> • to plot the data points • find the regression equations • find the cost for 15 hours for each • find the point of intersection of the two equations What does this point represent?

Use Microsoft Excel, an online graphing tool or graph paper if you do not have access to a graphing calculator.

TABLE 1

Hours	Costs 5 incandescent bulbs	Costs 5 fluorescent lamps
3		
5		
7		
9		
11		

INTERNET RESOURCES

The following mathematics titles are weblinks for students, and parents that include activities, and/or multimedia resources.

Mathematics Web Sites	Description	URL
The Ancients - Mathematicians of the African Diaspora	This site gives the history of mathematics in Africa south of the Sahara.	http://www.math.buffalo.edu/mad/Ancient-Africa/index.html
Atomic Learning	A web-based software training for more than 100 applications students and educators use everyday.	http://www.atomiclearning.com/
Coolmath.com - An amusement park of mathematics... and more!	A site filled with math lessons, games, problems, and other mathematics resources.	http://www.coolmath.com/
FCAT Explorer	FLDOE online resource for FCAT math and reading.	http://www.fcatexplorer.com/
Free Worksheets	Free worksheets for K-12 education.	http://www.freeworksheets.com/
MathDrill	Math problems are organized into 86 levels (and increasing), ranging from simple ordering of numbers to addition and subtraction fractions, time, algebra and geometry,	http://www.mathdrill.com/
Math in Daily Life	The site explores how math can help us in our daily lives.	http://www.learner.org/exhibits/dailymath/
Math Mania	An Amazing Mathematical Object Factory produces lists of mathematical objects in response to users' input.	http://theory.cs.uvic.ca/~cos/amof/
Math Forum Home Page	Is a leading online resource for improving math learning, teaching, and communication since 1992.	http://mathforum.org/
National Library of Virtual Manipulates	The National Library of Virtual Manipulatives (NLVM) is an NSF supported project that began in 1999 to develop a library of uniquely interactive, web-based virtual manipulatives or concept tutorials, mostly in the form of Java applets, for mathematics instruction (K-12 emphasis).	http://nlvm.usu.edu/en/nav/index.html
Riverdeep	The District's free online interactive math resource for students.	http://riverdeep.dadeschools.net/lms
TI Calculator Link	Texas Instrument's graphing calculator resources.	http://education.ti.com/educationportal/sites/US/homePage/index.html

Federal and State Laws

The School Board of Miami-Dade County, Florida adheres to a policy of nondiscrimination in employment and educational programs/activities and strives affirmatively to provide equal opportunity for all as required by law:

Title VI of the Civil Rights Act of 1964 - prohibits discrimination on the basis of race, color, religion, or national origin.

Title VII of the Civil Rights Act of 1964, as amended - prohibits discrimination in employment on the basis of race, color, religion, gender, or national origin.

Title IX of the Educational Amendments of 1972 - prohibits discrimination on the basis of gender.

Age Discrimination in Employment Act of 1967 (ADEA), as amended - prohibits discrimination on the basis of age with respect to individuals who are at least 40.

The Equal Pay Act of 1963, as amended - prohibits gender discrimination in payment of wages to women and men performing substantially equal work in the same establishment.

Section 504 of the Rehabilitation Act of 1973 - prohibits discrimination against the disabled.

Americans with Disabilities Act of 1990 (ADA) - prohibits discrimination against individuals with disabilities in employment, public service, public accommodations and telecommunications.

The Family and Medical Leave Act of 1993 (FMLA) - requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to "eligible" employees for certain family and medical reasons.

The Pregnancy Discrimination Act of 1978 - prohibits discrimination in employment on the basis of pregnancy, childbirth, or related medical conditions.

Florida Educational Equity Act (FEEA) - prohibits discrimination on the basis of race, gender, national origin, marital status, or handicap against a student or employee.

Florida Civil Rights Act of 1992 - secures for all individuals within the state freedom from discrimination because of race, color, religion, sex, national origin, age, handicap, or marital status.

Veterans are provided re-employment rights in accordance with P.L. 93-508 (Federal Law) and Section 295.07 (Florida Statutes), which stipulates categorical preferences for employment.

Revised 9/2008