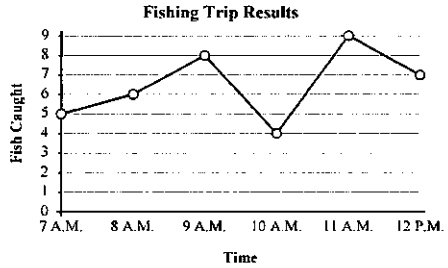
Week of: *2/27/17-3/3/17* **Name** _____

ALGEBRA SPIRAL REVIEW

MONDAY

Label each section of the graph.



Simplify.

$(5p^2 - 3) + (2p^2 - 3p^3)$ _____

$(4n - 3n^3) - (3n^3 + 4n)$ _____

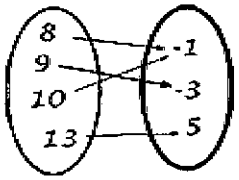
$(3v^5 + 8v^3 - 10v^2) - (-12v^5 + 4v^3 + 14v^2)$

_____

$(-10k^2 + 7k + 6k^4) + (-14 - 4k^4 - 14k)$

_____

Is the relation a function?



_____

Solve.

The school that Lisa goes to is selling tickets to the annual talent show. On the first day of ticket sales the school sold 4 senior citizen tickets and 5 student tickets for a total of $102. The school took in $126 on the second day by selling 7 senior citizen tickets and 5 student tickets. What is the price each of one senior citizen ticket and one student ticket?

_____

Children_____ Senior _____

Complete the table and write the rule.

	-46
-2	
1	8
3	

RULE:_____

Which makes the equation true?
y<6x-9

A.(0,-8) B.(1,-5) C.(8,-2) D.(0,0)

Simplify.

$3p(2p - 6)$ _____

$9d^2(6d^2 + 3d + 4)$

_____

$4g^2(7g^2 + 9gd - 5d^2)$

_____

$7y(2y^2 + 4y + 3)$

_____

$4(9h^2 + 3hq + 7q^2)$

_____

$2z(3z - 8d)$ _____

$6c^3(3c^2 + 7cr - 5r^2)$ _____

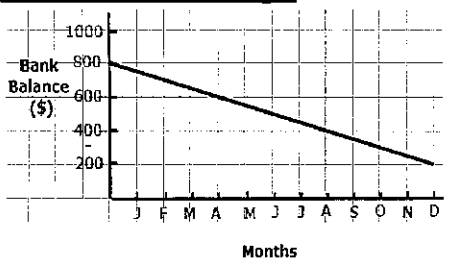
$3(6q^2 + 4q - 5)$ _____

$2(7y + 6)$ _____

$5p^3(8p^2 + 6p + 2)$ _____

TUESDAY

Find the rate of change.



_____

Find the slope of the line.

(3,7) (8,5) _____

(6,0) (-4,3) _____

(17,-2) (1, 2) _____

Find the x and y-intercepts of the line.

y= 6x+9 _____

3y= 7x-2 _____

Write the equation of a line in point slope form.

m=5 (8,-3) _____

m=⅓ (-2, -6) _____

Solve.

An amusement park charges $5.00 per child, and $7.00 per adult. If 34 adults paid admission, and the park made a total of $490, how many kids paid admission?

_____

_____ Kids

Write an equation of a line that is parallel.

y=8x - 4; (2, -6) _____

5x + 7y = 10; (9, 1) _____

Write an equation of a line that is perpendicular.

y=1/3x + 17; (5, -8) _____

9x + 3y = 2; (0, -12) _____

Through: (5, 3), **parallel to:** y=6x-13

_____

Solve.

$(14p^4 + 11p^2 - 9p^5) - (-14 + 5p^5 - 11p^2)$

_____

Simplify.

(q - 7) (q + 3) _____

(y - 2) (5y - 8) _____

(y + 3) (9y + 2) _____

(3p - 9) (p + 4) _____

(7k + 4) (k - 2) _____

(4z + 3) (7z + 8) _____

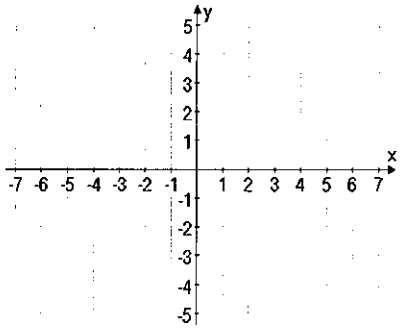
(3r - 7) (2r + 5) _____

(r + 9) (r - 2) _____

WEDNESDAY

Solve by graphing.

y=x-2
y=-3x+5



Use a graphing calculator to solve.

6	12	18	24	30
13	25	37	49	61

_____

Solve.
8,17,35,71... _____
FInd the 9th term _____

Solve by substitution.

y = 9x +4
-2x - 8y = 14 _____

x - 3y = 17
y = 11x + 6 _____

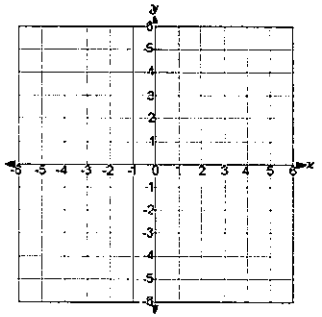
Solve by elimation.

5x + 2y = 19
-3x - 2y = 11 _____

8x + 4y = 12
-4x - 8y = -7 _____

Graph the system of inequalities.

$y \geq x + 5 \quad y < 6x - 4$



Simplify.

$(x^6 x^{-3})^2$ _____

$(x^5) \cdot (2x^2)^3$ _____

$\frac{3x^2y^5 \cdot xy^4}{2x^6y}$ _____

Simplify.

$(3x^2 - 4x - 1) + (8x^2 - x + 6)$

_____

$(4x^2 - x - 7) + (2x^3 + 6x^2 - 11)$

_____

$(5x^4 - 4x^3 - 3x - 4) - (2x - 6x^3 - 2x^4)$

_____

$(7x^3 + 3x^2 + 4x + 10) - (10 + 8x + 3x^3)$

_____

$8(y + 6) - 6(y^2 - 6y + 4)$

_____

$3(c - 4) - 5(c^2 + 4c - 8)$

_____

$(x - 1)(x - 10)$

_____

$(x + 3)(x - 4)$

_____

THURsDAY

Write in scientific notation.

4,008,000,000 _____

74.2 _____

0.0000002514 _____

2.9 _____

0.016389925 _____

333,333,300 _____

Write in standard form.

8.26×10^4 _____

9.4502×10^{-6} _____

Solve.
Elsa went to Dollar General to buy food. Each can of soup costs $1.25, or three for $3.00. Elsa has no more than $10 to spend on food. Write an inequality that represents Elsa's situation and solve.

_____

Write in scientific notation.

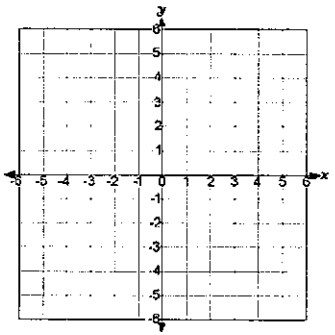
$(4 \times 10^5)(2.5 \times 10^9)$ _____

$(6.3 \times 10^2)(7.8 \times 10^3)$

_____

$(2 \times 10^8)(6.1 \times 10^4)$ _____

Use the vertical line test to determine whether the relation is a function.
(2,-4) (6,1) (-6,3) (0,-5)



Solve.
5, 25, 125, 625, _____
Find the 8th term. _____

Find the perimeter and the area of the figures.

P= _____
A= _____

P= _____
A= _____