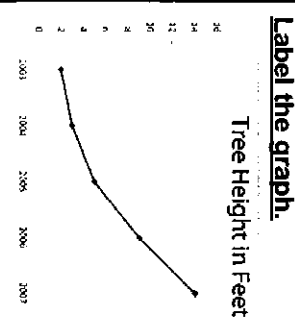
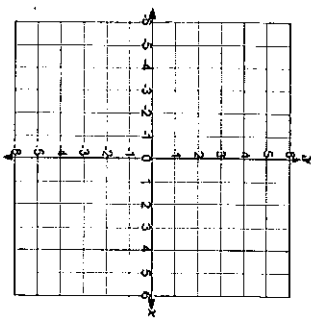


ALGEBRA SPIRAL REVIEW

<p>Label the graph.</p> <p style="text-align: center;">Tree Height in Feet</p>  <p>Sketch a graph for the situation: you are running late to school.</p>	<p>Is the relation a function?</p> <p>-6 -7 2 - 6 5 - 1 -4 - -5</p> <p>Use the vertical line test to determine if the relation is a function.</p> <p>(5,-2) (9,9) (4, -1) (-5, 2)</p> <p>Write in scientific notation.</p> <p>0.0003 _____ 15.9 _____ 1.6 _____ 700000 _____</p>	<p>Write a rule and complete the table.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: black; color: white; text-align: center;">3</td> <td style="text-align: center;">9</td> </tr> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">25</td> </tr> <tr> <td style="text-align: center;">9</td> <td style="text-align: center;">81</td> </tr> </table> <p>Rule: _____</p>	3	9	7	25	9	81	<p>Name each expression based on its number of terms.</p> <p>$5x^2 - 2x + 3$ _____</p> <p>$w^2 + 2$ _____ -15</p> <p>Write each polynomial in standard form.</p> <p>$4x - 3x^2$ _____</p> <p>$c^2 - 2 + 4c$ _____</p> <p>$-10 + 4q^4 - 8q + 3q^2$ _____</p>		
3	9										
7	25										
9	81										
<p>Find the x and y-intercepts of the lines.</p> <p>$6y = 4x + 9$ _____</p> <p>$7y = -2x - 5$ _____</p> <p>Solve.</p> <p>Jones works at Wal-Mart and Dairy Queen. In Wal-Mart, he earns 8\$/hr, and in Dairy Queen he earns 11\$/hr. Last week, he worked 16 hours, and earned a total of 149\$. How long did he work each job?</p> <p>Wal-Mart: _____</p> <p>Dairy Queen: _____</p>	<p>Find the next three terms of each sequence.</p> <p>20, 50, 80, ... _____</p> <p>27, 36, 45, ... _____</p> <p>2, 1, 0.5, ... _____</p> <p>Solve.</p> <p>Suppose you have 20\$ in your bank account. You start saving 5\$ each week. Your friend has 170\$ and removes 10\$ each week. When will you and your friend have the same amount in your accounts?</p> <p>Weeks _____ \$ _____</p> <p>Solve.</p> <p>7, 14, 28, 56, _____</p> <p>What is the pattern? _____</p> <p>What would be the 10th number? _____</p>	<p>Make a function table for the equation. $f(n) = 4x + 8$</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table> <p>Solve.</p> <p>$Arith. = A(n) = b + (n-1)a$</p> <p>$Geo. = A(n) = a(b^{-n})$</p> <p>6, -12, 24, -48, _____</p> <p>What is the pattern? _____</p> <p>What would be the 12th number? _____</p> <p>90, _____, 40, 26, 67, 17, 78</p> <p>What is the pattern? _____</p> <p>Write the equation of the line in point-slope form.</p> <p>$m = 6$ (9, -3) _____</p> <p>$m = \frac{1}{2}$ (7, -1) _____</p>									<p>Simplify each difference.</p> <p>$(17n^4 + 2n^3) - (10n^4 + n^3)$ _____</p> <p>$(-5x^4 + x^2) - (x^3 + 8x^2 - x)$ _____</p> <p>$(2x^3 - 5x^2 - 1) - (8x^3 + 3 - 8x^2)$ _____</p> <p>$(-7z^3 \div 3z - 1) - (-6z^2 + z + 4)$ _____</p> <p>$(24x^5 + 12x) - (9x^5 + 11x)$ _____</p> <p>$(6w^2 - 3w + 1) - (w^2 + w - 9)$ _____</p>

Solve by graphing.

$y = 9x + 6$ $y = -2x + 8$



Use a graphing calculator to solve.

30	60	90	120	150
3	6	9	12	15

Simplify, put in scientific notation.

6×10^9 _____
 2×10^3 _____
 7×10^6 _____
 5×10^2 _____
 $(8 \times 10^5)(3 \times 10^6)$ _____

Solve by substitution.

$y = 3x + 4$ _____
 $-7x - 5y = 8$ _____

$x + 3y = 15$ _____
 $y = 6x + 10$ _____

Solve by elimination.

$2x - 9y = -14$ _____
 $5x + 9y = 11$ _____

$x + 7y = 4$ _____
 $-3x - y = 18$ _____

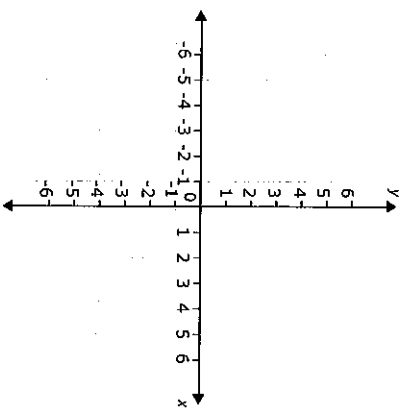
Solve.

Brenda's school is selling tickets to a spring musical. On the first day of ticket sales the school sold 3 senior citizen tickets and 9 child tickets for a total of \$75. The school took in \$67 on the second day by selling 8 senior citizen tickets and 5 child tickets. What is the price each of one senior citizen ticket and one child ticket?

Senior: _____
Child: _____

Graph the system of inequalities.

$y < -x + 3$ $y \leq 8x - 1$



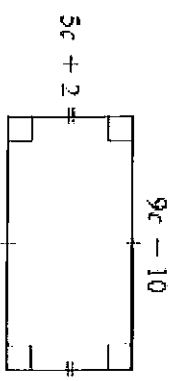
Write each number in scientific notation.

49×10^7 _____
 381×10^6 _____
 2.53×10^4 _____

Write a rule for each sequence, and determine if it is geometric or arithmetic.

8, 16, 32... _____
 -2.5, -3, -3.5... _____
 63, 54, 45... _____

Find the perimeter of the figure.



Simplify the expression.

$(x^3 + 3x) + (12x - x^4)$

$(6g - 7g^8) - (4g + 2g^3 + 11g^2)$

$(2k^4 - 5h^9) - (-8k^5 + h^{10})$

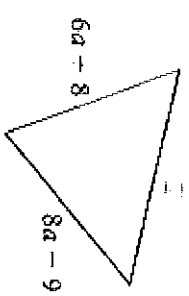
$(-4t^4 - 9t + 6) + (13t + 5t^4)$

$(8b - 6b^7 + 3b^8) + (2b^7 - 5b^9)$

$(11 + k^3 - 6k^4) - (k^2 - k^4)$

Find the missing angle.

Perimeter = $23a - 7$



T H U R S D A Y