Name:

Algebra I EOC Review Week 1

Day 1	Unit 1 Review	Day 2	Solving Review
1. 3√125 + √80	<ul><li>2. In problem #1, is it the sum of rational numbers, irrational numbers, or one of each?</li><li>Is the sum rational or irrational?</li></ul>	1. $\frac{5-3x}{2} = -6$	2. $2(5x - 1) = 12 - 3x$
<ol> <li>(4√50)(√18)</li> </ol>	<ul><li>4. In problem #3, is it the product of rational numbers, irrational numbers, or one of each?</li><li>Is the product rational or irrational?</li></ul>	3. $8(4-x) = x + 32 - 9x$	4. $3(2-4x) < 6+2x$
5. Identify the parts of the expression $-3x^2 + 9x - 6$ Terms: Factors: Coefficients Constants:	6. The expression $s^2$ is used to calculate the area of a square, where s is the side length of the square. What does the expression $(8x)^2$ represent? The area of a square with side length A. 8 C. 4x B. 16 D. 8x	5. $2(x-3)^2 - 6 = 18$	6. $-3(x+5)^2+9=-39$
7. Which expression has the same value as the expression $(8x^2 + 2x - 6) - (5x^2 - 3x + 2)$ ? A. $3x^2 - x - 4$ B. $3x^2 + 5x - 8$ C. $13x^2 - x - 8$ D. $13x^2 - 5x - 4$	8. What is the area of the patio as an expression?	7. $4x^2 - 5x - 5 = 8x - 2x^2$	8. $3x^2 - 10x + 5 = 0$
9. Convert 653 meters to feet. Use 2.54 cm = 1 in.	<ul> <li>10. Jill swam 200 meters in</li> <li>2 minutes 42 seconds. If</li> <li>each lap is 50 meters long,</li> <li>which is MOST LIKELY to</li> <li>be her time, in seconds per</li> <li>lap?</li> <li>A. 32 seconds</li> <li>B. 40 seconds</li> <li>C. 48 seconds</li> <li>D. 60 seconds</li> </ul>	9. $5^{2x-1} - 9 = 116$	$10. \qquad \left(\frac{1}{9}\right)^x \ge 27^{2-x}$
Completion Stamp		Completion Stamp	

Day 3	Graphing Review	Day 4	Transformations & RoC
1. Graph $f(x) = -\frac{3}{4}x - 2$	2. Graph $g(x) = -(x + 1)^2 + 9$	1. Describe the transformations of the function $f(x) = -4(x+6)^2 + 9$ Parent Function: Transformations:	2. Find the rate of change of $f(x) = -4(x+6)^2 + 9$ for -1 < x < 2
3. Find the characteristics of f(x) Domain: Range: X-Int: Y-Int: Int of Inc: Int of Dec: End Behavior: As $x \rightarrow $ , f(x) $\rightarrow $	4. Find the characteristics of g(x) Vertex: AoS: D: R: Inc: Dec: Extrema: Max/Min Value: Y-Int: Zeroes: End: As $x \rightarrow $ , g(x) $\rightarrow $	3. Describe the transformations of the function $g(x) = \frac{5}{2} \left(\frac{1}{3}\right)^{x-3} - 5$ Parent Function: Transformations:	4. Find the rate of change of $g(x) = \frac{5}{2} \left(\frac{1}{3}\right)^{x-3} - 5$ for 0 < x < 2
5. Graph $h(x) = 2x^2 - 8x$	6. Graph $m(x) = -2\left(\frac{1}{3}\right)^{x+2} + 4$	5. Find the rate of change for -2 < x < 1	6. Find the rate of change for -3 < x < 3
7. Find the characteristics of h(x)Vertex:AoS:D:R:Inc:Dec:Extrema:Max/Min Value:Y-Int:Zeroes:End:As $x \rightarrow $ , h(x) $\rightarrow $ As $x \rightarrow $ , h(x) $\rightarrow $	8. Find the characteristics of m(x) D: R: Asymptote: X-Int: Y-Int: B 1 Growth or Decay? End: As $x \rightarrow$ , m(x) $\rightarrow$ As $x \rightarrow$ , m(x) $\rightarrow$	7. Find the rate of change for $-2 < x < 1$ $h(x) = 3x^2 - 2x + 5$	8. Find the rate of change for $-3 < x < 0$ $m(x) = \left(\frac{1}{4}\right)^{x-1} + 2$
Completion Stamp		Completion Stamp	