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


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