AA Unit 2: Inverses Notes

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| **I can find the INVERSE of a function algebraically.**The first step to finding the inverse of $h(x)=\sqrt{2x+1}+5$ is to switch the \_\_\_\_ and the \_\_\_\_\_ to form the equation \_\_\_\_\_\_\_\_\_\_\_\_\_Then solve this equation for \_\_\_\_\_\_ by Reversing Operations. | **I can find the INVERSE from a given table.**The table representing the inverse $f^{-1}(x)$ can be created by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| **I can graph the INVERSE from a given graph.**To draw the INVERSE, I locate \_\_\_\_\_\_\_\_\_\_\_ on the original graph and switch the \_\_\_\_ and the \_\_\_\_\_ and graph these new points. | **I can use a graph to determine whether or not a RELATION is a FUNCTION.**The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Line Test shows that a RELATION is a function if any \_\_\_\_\_\_\_\_\_\_\_\_ line hits the graph in AT MOST \_\_\_\_\_\_\_\_ point.The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Line Test shows that a RELATION is NOT a function if any \_\_\_\_\_\_\_\_\_\_ line hits the graph in MORE THAN \_\_\_\_\_\_\_\_ point. |
| **I can use a table to determine whether or not a RELATION is a FUNCTION.**If a table has repeated \_\_\_\_ values that have different. \_\_\_\_ values then the table \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_If each \_\_\_\_\_ value in a table has only one \_\_\_\_\_\_ value then the table \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **I can use COMPOSITE FUNCTIONS to determine whether on not two functions are INVERSES.**$f(x)=2\sqrt{x-1}+2$ and $g(x)=(\frac{x-2}{2})^{2}+1$The COMPOSITE FUNCTION $f(g(x))$ means you replace the x in \_\_\_\_\_\_\_\_\_ with \_\_\_\_\_\_\_\_\_\_\_\_\_\_ If two functions are INVERSES then $f(g(x))$ simplifies to \_\_\_\_\_\_\_\_. This makes sense because if two functions are INVERSES, combining the two functions should \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  |