

**Algebra 2A**  
**Practice Quiz on 6-7**

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Hr: \_\_\_\_\_

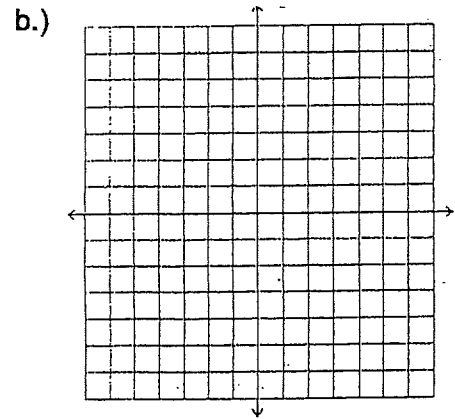
**SHOW ALL WORK**

a.) Find the inverse of the relation below.

x	-2	-1	0	2
y	4	2	0	-1

b.) Graph the given relation and its inverse.

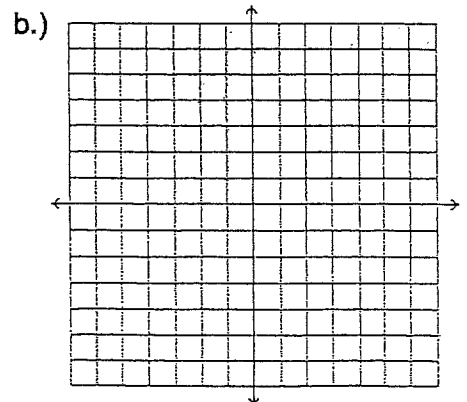
1. a.) \_\_\_\_\_



**For #2-4, a.) find the inverse equation for each function. b.) Graph each function and its inverse. c.) Is the inverse a function?**

2.  $y = 3x - 2$

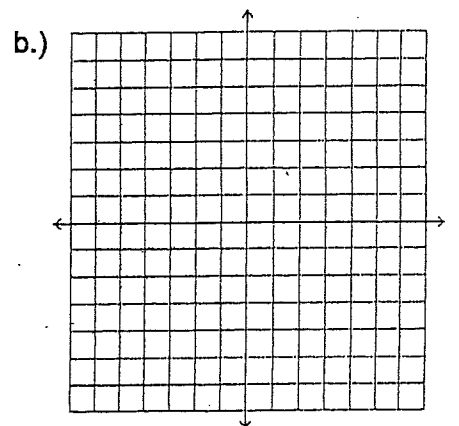
2. a.) \_\_\_\_\_



c. \_\_\_\_\_

3.  $y = x^2 + 4$

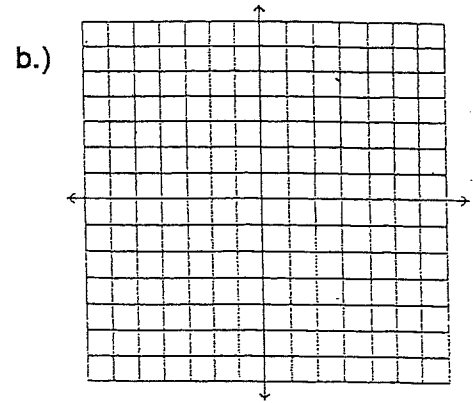
3. a.) \_\_\_\_\_



c. \_\_\_\_\_

4.  $y = (2x - 1)^2$

4. a.) \_\_\_\_\_



c.) \_\_\_\_\_

**For #5-7, a.) find the inverse equation for each function. Find the b.) domain and c.) range of the original function. Find the d.) domain and e.) range of the inverse.**

5.  $f(x) = \sqrt{x - 4}$

5. a.) \_\_\_\_\_

b.) \_\_\_\_\_

c.) \_\_\_\_\_

d.) \_\_\_\_\_

e.) \_\_\_\_\_

6.  $f(x) = 2x^2 + 5$

6. a.) \_\_\_\_\_

b.) \_\_\_\_\_

c.) \_\_\_\_\_

d.) \_\_\_\_\_

e.) \_\_\_\_\_

7.  $f(x) = 2x - 1$

7. a.) \_\_\_\_\_

d.) \_\_\_\_\_

c.) \_\_\_\_\_

d.) \_\_\_\_\_

e.) \_\_\_\_\_

8. The formula for the volume of a sphere is  $V = V = \frac{4}{3}\pi r^3$ .

8. a.) \_\_\_\_\_

a.) Find the inverse of the formula.

b.) \_\_\_\_\_

b.) Use the inverse to find the radius of a sphere that has a volume of 35,000 ft<sup>3</sup>.

**For #9-11,  $f(x) = 2x + 3$ . Find each value.**

9.  $(f^{-1} \circ f)(2)$

9. \_\_\_\_\_

10.  $(f \circ f^{-1})(4)$

10. \_\_\_\_\_

11.  $(f \circ f)(-3)$

11. \_\_\_\_\_

