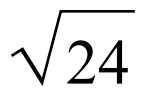
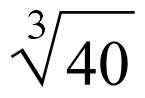
**ALGEBRA 2** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block \_\_\_\_

Unit 4, Test 1 Review

**Rational Exponents**

1. **Rewrite** the following using rational exponent notation.
   1. 
   2. 
   3. 

d) 

1. **Rewrite** using radical notation.
   1. 
   2. 
   3. 
2. **Evaluate** the expression without negative exponents.
   1. () =

b. 16 =

* 1. 4 =

4) Find the compositions of given values if: Let   

1. **b)**

**c) d)**

1. Find the equation of the inverse relation, then determine if the inverse is a function:

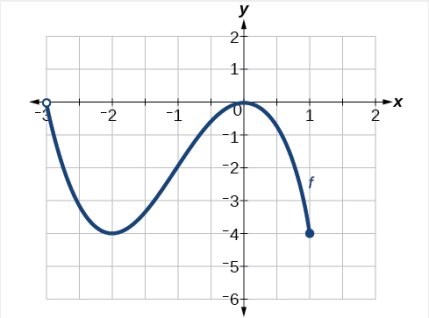
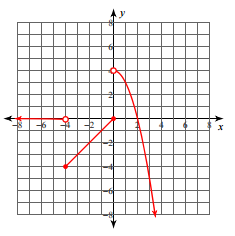
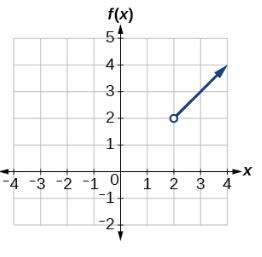
a)  b) ; c) 

Function: Yes or No Function: Yes or No Function: Yes or No

D: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ D: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ D: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

R: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ R: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ R: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

6) Name the domain and range of each graph using interval notation.

 a. b. c.

D: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ D: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ D: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

R: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ R: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ R: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7) Circle the expression that does **not** belong in a group with the other three? Justify your reasoning, including any necessary to work to support the explanation. ( a little tricky ☺)

a) b) c) d)

8) Simplify. Leave answers without negative exponents.

1. b)

c) d)

9) For and answer the following making sure to show all work.

b) c)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 0 | 1 | 2 | 3 | 4 |
|  | -8 | -1 | 0 | 1 | 8 |

is shown in the table alongside.

Is the inverse of a function?\_\_\_\_\_\_\_\_\_\_\_\_ Why/why not?

11) Use composition of functions to decide if are inverse functions. Show work to prove your answer.

12) For and answer the following making sure to show all work.

b) c)