

## HCCM2 Day 5 HW: Graphing Radical Functions

Answer the questions and sketch a graph.

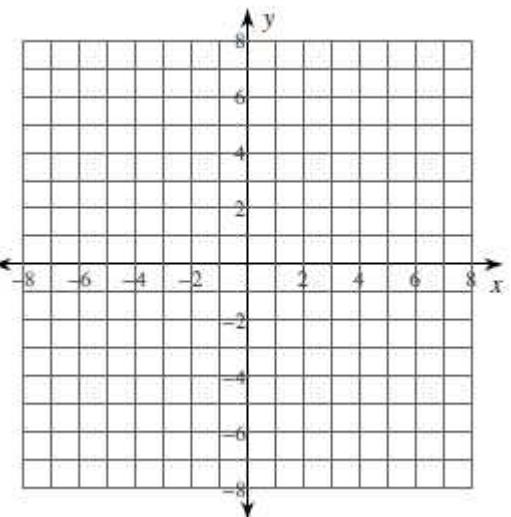
1)  $y = -2\sqrt{x+2}$

a) Describe the transformations from the parent function:

\_\_\_\_\_

b) Domain: \_\_\_\_\_

c) Range: \_\_\_\_\_



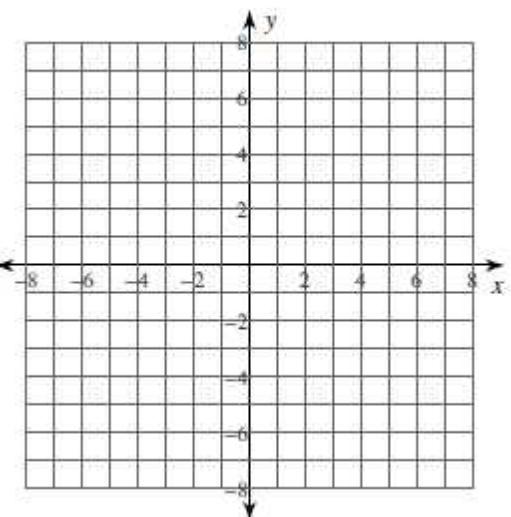
2)  $y = \frac{1}{2}\sqrt[3]{x+1} + 4$

a) Describe the transformations from the parent function:

\_\_\_\_\_

b) Domain: \_\_\_\_\_

c) Range: \_\_\_\_\_



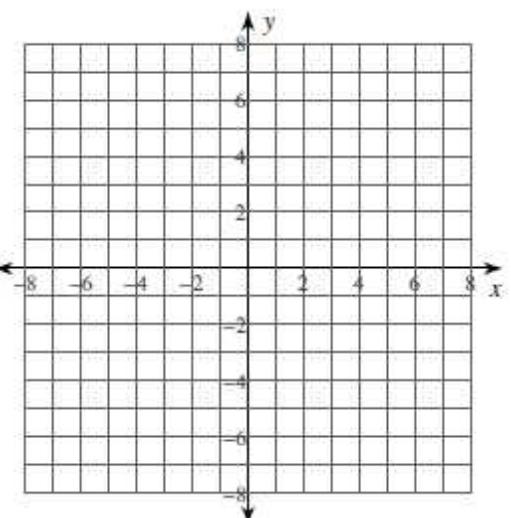
3)  $y = \sqrt{x-4} - 2$

a) Describe the transformations from the parent function:

\_\_\_\_\_

b) Domain: \_\_\_\_\_

c) Range: \_\_\_\_\_



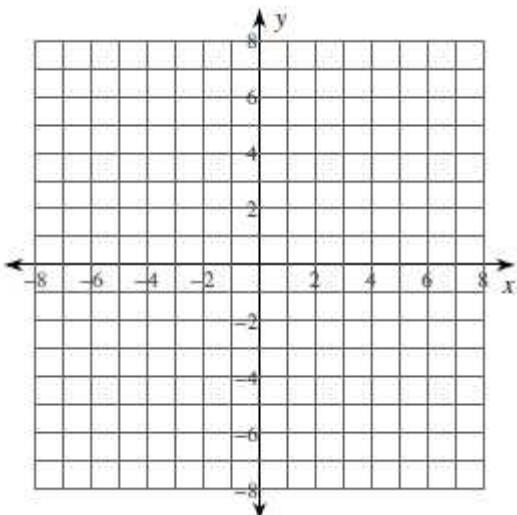
$$4) \quad y = -2 + \sqrt[3]{x}$$

a) Describe the transformations from the parent function:

\_\_\_\_\_

b) Domain: \_\_\_\_\_

c) Range: \_\_\_\_\_



5)

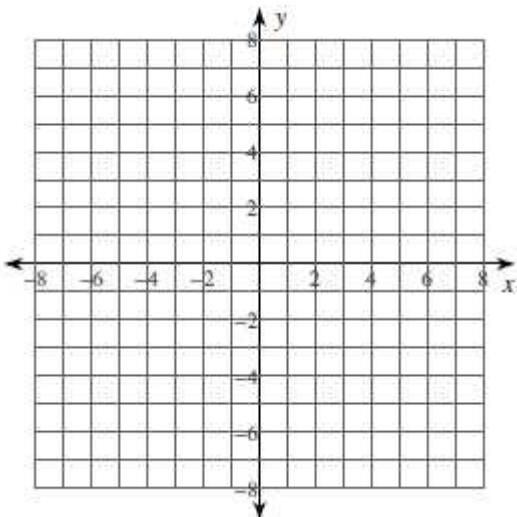
$$y = \sqrt{x} - 2$$

a) Describe the transformations from the parent function:

\_\_\_\_\_

b) Domain: \_\_\_\_\_

c) Range: \_\_\_\_\_



Rewrite the function so that it is in graphing form. Describe the transformations from the parent graph.

$$6) \quad y = \sqrt{81x + 162}$$

$$7) \quad y = -\sqrt{4x + 20}$$

$$8) \quad y = \sqrt[3]{125x - 250}$$

$$9) \quad y = -\sqrt[3]{8x - 56} + 4$$