## Review - Graphing the 6 Basic Functions with Transformations

### **Question #1**

What would be the image equation for the graph y = |x| with the following transformations:

- shifted left 3
- reflection in the y-axis
- vertical stretch by a factor of 4
- shifted down 1

## **Question #2**

Accurately graph the following function, and state the domain and range of the function:

$$y = -\sqrt{2x - 8} - 1$$

## **Question #3**

Determine the equation of this function:



#### **Question #4**

Accurately graph the following function, and state the domain and range of the function:

$$y = -\frac{1}{2-x} + 4$$

[KU -2]

[APP-8]

[APP-7]

[KU-3]

# Review - Graphing the 6 Basic Functions with Transformations

[Ku-3]

[Ku-2]

What would be the image equation for the graph y = |x| with the following transformations:

- shifted right 2
- reflection in the x-axis
- horizontal stretch by a factor of  $\frac{1}{2}$
- shifted up 8 \_

Accurately graph the following function, and state the domain and range of the function: [APP-7]

$$y = -\sqrt{\frac{1}{2}x + 3} - 4$$



Accurately graph the following function, and state the domain and range of the function: Question #4 [APP-8]



Determine the equation of this function:

Question #3