## 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:

$$
y=-\sqrt{2 x-8}-1 \quad[\text { APP - 7] }
$$

## Question \#3

Determine the equation of this function:


## Question \#4

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

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

## Question \#1

What would be the image equation for the graph $\mathrm{y}=|\mathrm{x}|$ with the following transformations:

- shifted right 2
- reflection in the x -axis
- horizontal stretch by a factor of $1 / 2$
- shifted up 8


## Question \#2

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

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

## Question \#3

Determine the equation of this function:

[AP P-1]
$[\mathrm{Ku}-2]$ Question \#4
Accurately graph the following function, and state the domain and range of the function:

$$
y=-\frac{1}{3-x}+5
$$

