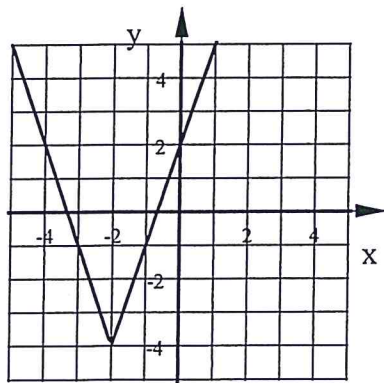


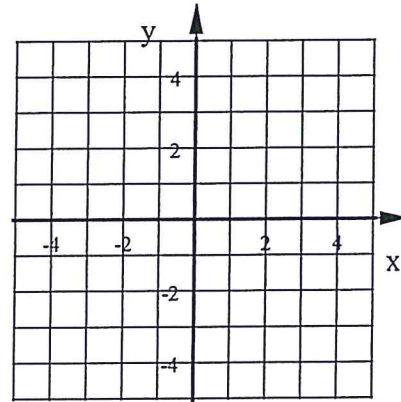
1. Write the equation of this absolute value graph:

EQ:



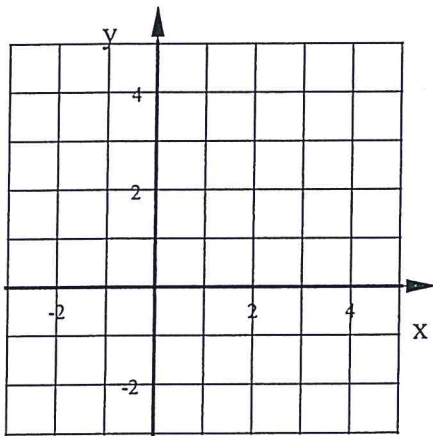
2. Graph this absolute value function:

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



3. Graph this system of equations:

$$y = 2 \quad y = |x - 1|$$



Use this graph to answer the following question: State the interval(s) for which this is true: $|x - 1| \geq 2$

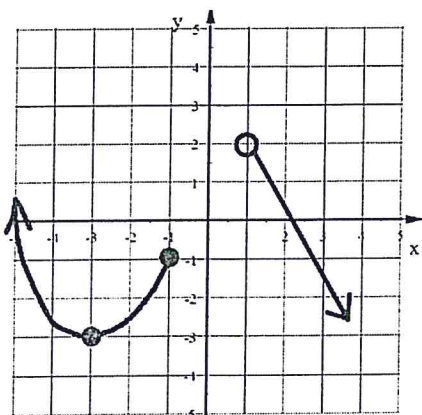
4. State the Domain and Range as well as the intervals of Increasing and Decreasing for the graph below:

Domain:

Range:

Inc:

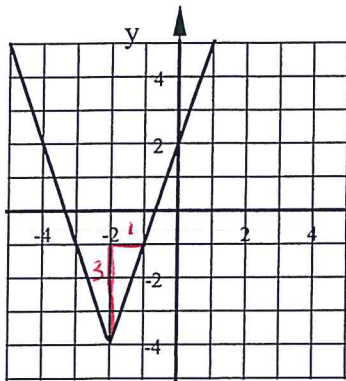
Dec:



Answers

1. Write the equation of this absolute value graph:

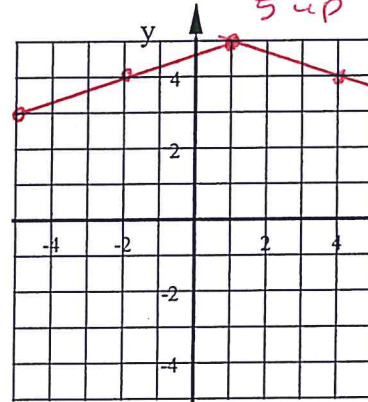
EQ: $y = 3|x+2| - 4$



vertex
(-2, -4)
2 left
4 down

2. Graph this absolute value function:

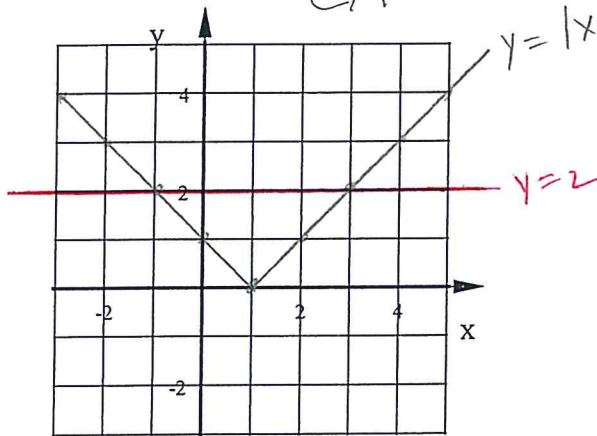
$y = -\frac{1}{3}|x-1| + 5$



vertex
(1, 5)
upside down
1/3 as tall
 $m = 1/3$

3. Graph this system of equations:

$y = 2$ $y = |x-1|$



Use this graph to answer the following question: State the interval(s) for which this is true: $|x-1| \geq 2$

One graph is greater than another graph when it is above it. $|x-1| \geq 2$ when the graph of $y = |x-1|$ is above $y = 2$.
 $x \leq -1, x \geq 3$

4. State the Domain and Range as well as the intervals of Increasing and Decreasing for the graph below:

Domain:

$x \leq -1, x > 1$

Range:

R

Inc:

$-3 < x < -1$

Dec:

$x < -3$

$x > 1$

