Quiz 1

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Answer to question NO:1.

x	0
y	2
x	1
y	1

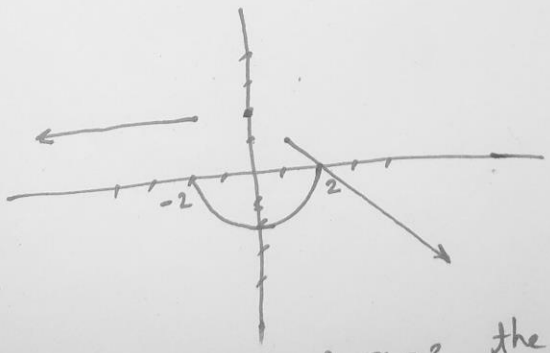
$$f(x) = \begin{cases} 2, & \text{if } x \le -2 \\ -\sqrt{4-x^2} & \text{if } -2 < x < 2 \\ 2-x, & \text{if } x \ge 2. \end{cases}$$

For the function f,

for $y = 2$, graph is the horizontal ray at $y = 2$, on interval $(-\infty, -2)$,

for $y = -\sqrt{4-x^2}$ on interval $(-2, 2)$ it is semicircle on the negative y axis.

& for $y = 2 - x$, it is the ray that cut y at 0 and x at 2.



at $f(x)$ $x = -2$ & $x = 2$ the function is not continuous as the graph is broken in that range.