

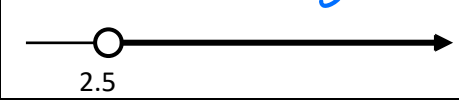


Mat1375, Classwork1, Fall 2024

ID: _____

Name: Sol

1. Complete the table

Inequality notation	Number line	Interval notation
$-2 \leq x < 3$		$[-2, 3)$
$2 \leq x \leq 5$		$[2, 5]$
$2.5 < x < \infty$		$(2.5, \infty)$

2. Check if $y = x^2 + 2x + 3$ is a function. Justify your answer.

Method 1

Since each input x has only one output y , then

$y = x^2 + 2x + 3$ is a function of x .

Method 2 Vertical line test

x	-3	-2	-1	0	1
y	6	3	0	3	6

Since each vertical line has only one intersection point (\triangle) with the graph, then

$y = x^2 + 2x + 3$ is a function of x

