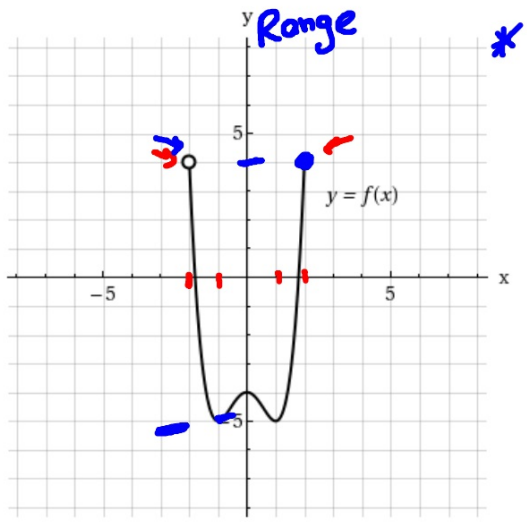
D: $(-2, 2]$

R: $[-5, 4]$



* $-2 < x \leq 2$

Domain

* $y = (2x - 5)$

* $3x + 2y = -3$

$3x + 2(2x - 5) = -3$

$3x + 4x - 10 = -3$

$7x - \cancel{10} = -3$

$\quad + \cancel{10} \qquad +10$

$\frac{7x}{7} = \frac{7}{7}$

$x = 1$

$y = 2x - 5$

$y = 2(1) - 5$

$y = 2 - 5$

$y = -3$

$(1, -3)$

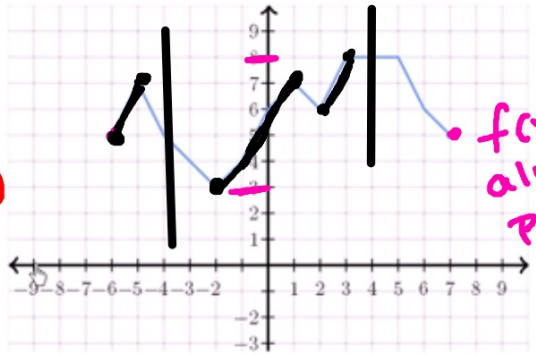
- yes it is a function

*. 3 intervals of increasing
- 3 intervals of decreasing
- 1 interval is constant

f(x) is always positive
(y)

Domain: [-6, 7]

Range: [3, 8]



f(x) is always positive

The graph is increasing from (-2,1), (-6,5) and (2,3)

$x = 5$, $f(x) = 8$ TRUE ✓

$y = 8$

$x = 1$ $f(x) = 0$ FALSE

$y = 0$

$f(3) > 5$ TRUE ✓

$6 > 5$

$f(11) = 1$ TRUE

$f(x) = 6$

y