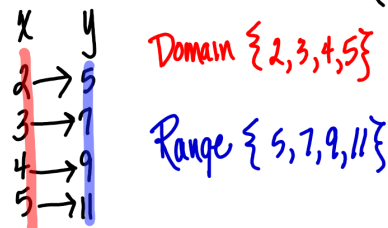


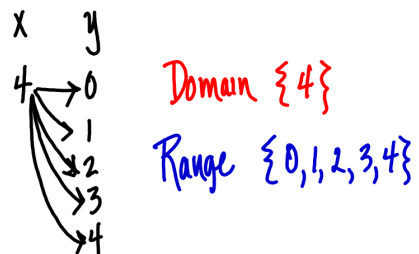
5.1

Relation : set of ordered pairs

$$\{(2,5) (3,7) (4,9) (5,11)\} \quad (x,y)$$



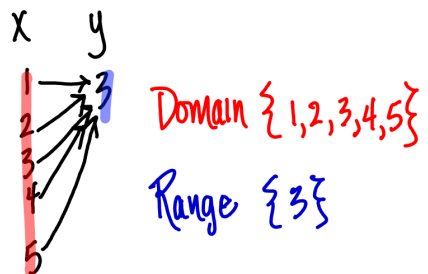
$$\{(4,0) (4,1) (4,2) (4,3) (4,4)\}$$



x -values Domain Independent Variable

y -values Range Dependent Variable

$$\{(1,3) (2,3) (3,3) (4,3) (5,3)\}$$



Function pairing between 2
sets of numbers. In which each
element of the first set is paired
with exactly one element of
the second set.

x's domain

y's range

Ex. 1 p 220

a) Domain $\{3, 5, 7\}$

Range $\{4, 6, 14\}$

b) Domain $\{4, 5, 7, 8\}$

Range $\{12, 18, 19\}$

$$d = rt$$

distance = rate (time)

$$d = 75t$$

t	d	Domain $\{t \geq 0\}$
0	0	Domain $\{0, 1, 2, 3, 4\}$
1	75	
2	150	Range $\{d \geq 0\}$
3	225	
4	300	Range $\{0, 75, 150, 225, 300\}$

$$y = 2x$$

x	y
0	0
1	2
2	4
3	6

Domain $\{0, 1, 2, 3\}$

Range $\{0, 2, 4, 6\}$

$\{(0, 0) (1, 2) (2, 4) (3, 6)\}$

$$2x + y = 8$$

$$(5, ?)$$

Substitute

$$2(5) + y = 8$$

$$\text{Solve } 10 + y = 8 - 10$$

$$y = -2$$

$$(5, -2)$$

$$2x + y = 8$$

$$(\overset{?}{x}, -4)$$

Substitute

$$2x - 4 = 8 + 4$$

Solve

$$\frac{2x}{2} = \frac{12}{2}$$

$$(6, -4)$$

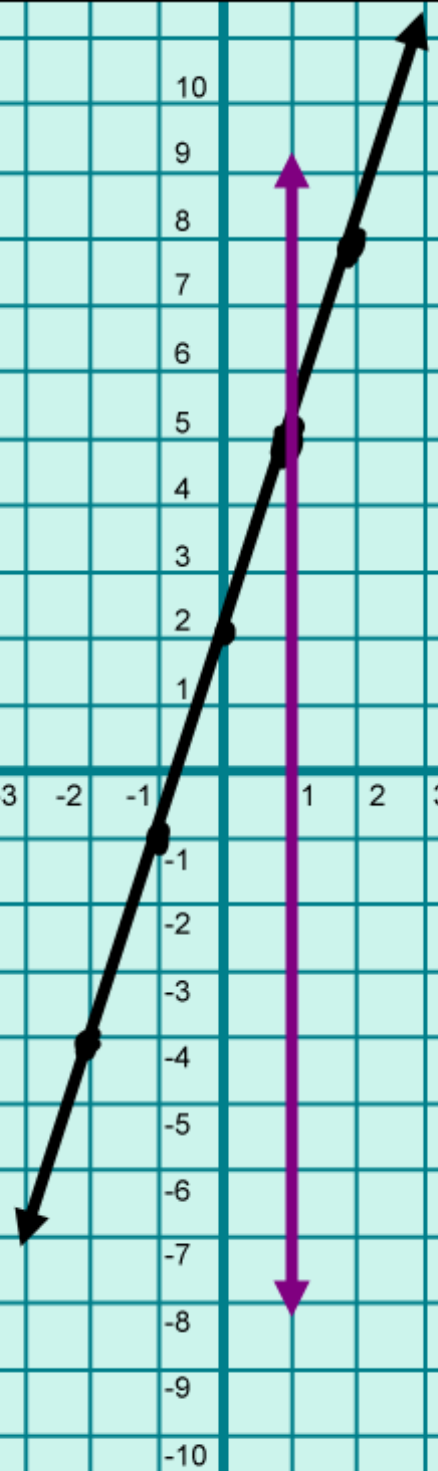
$$x = 6$$

$(1, 5)$
 $(-2, -4)$

X

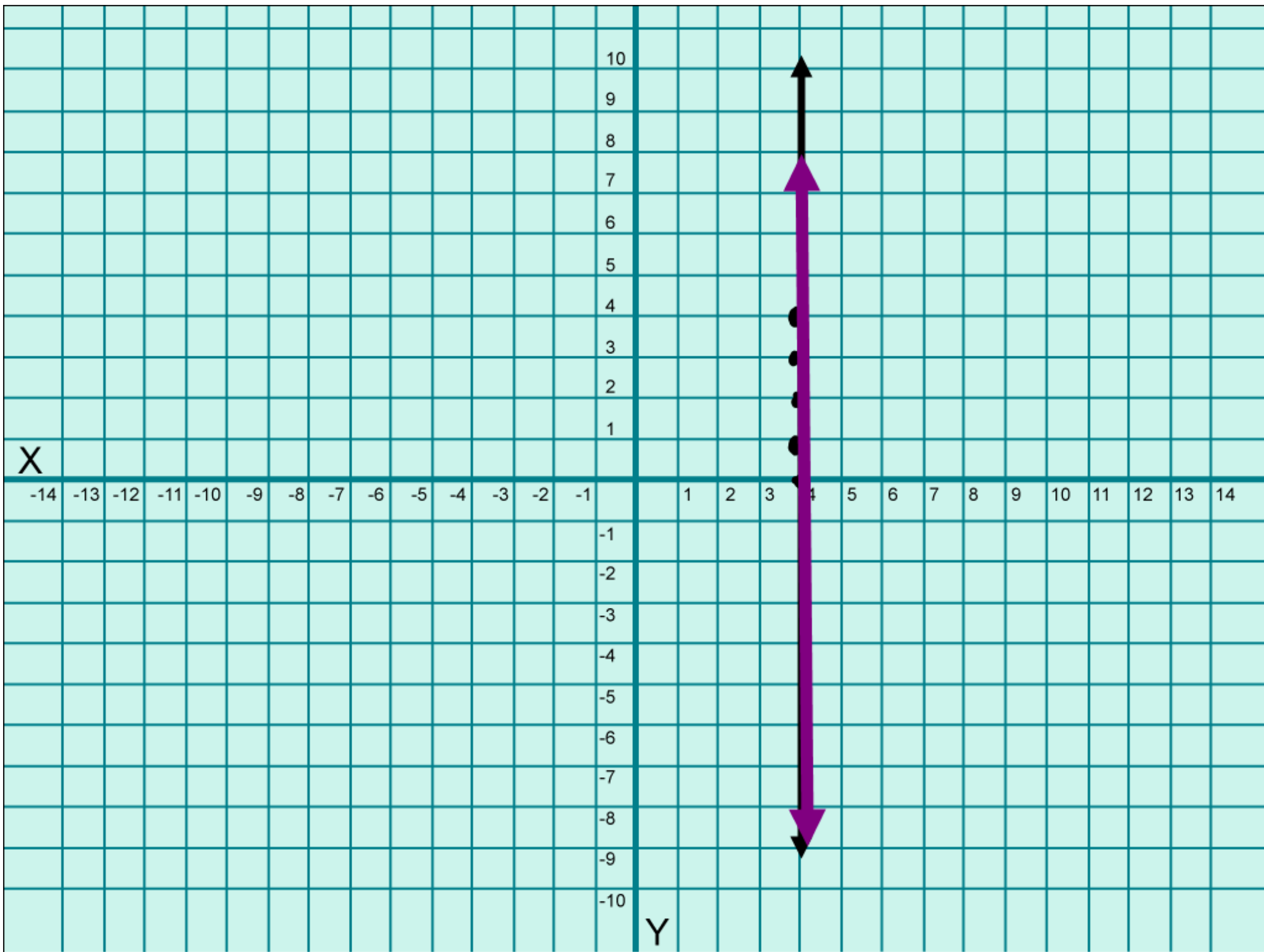
-14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 1 2 3 4 5 6 7 8 9 10 11 12 13 14

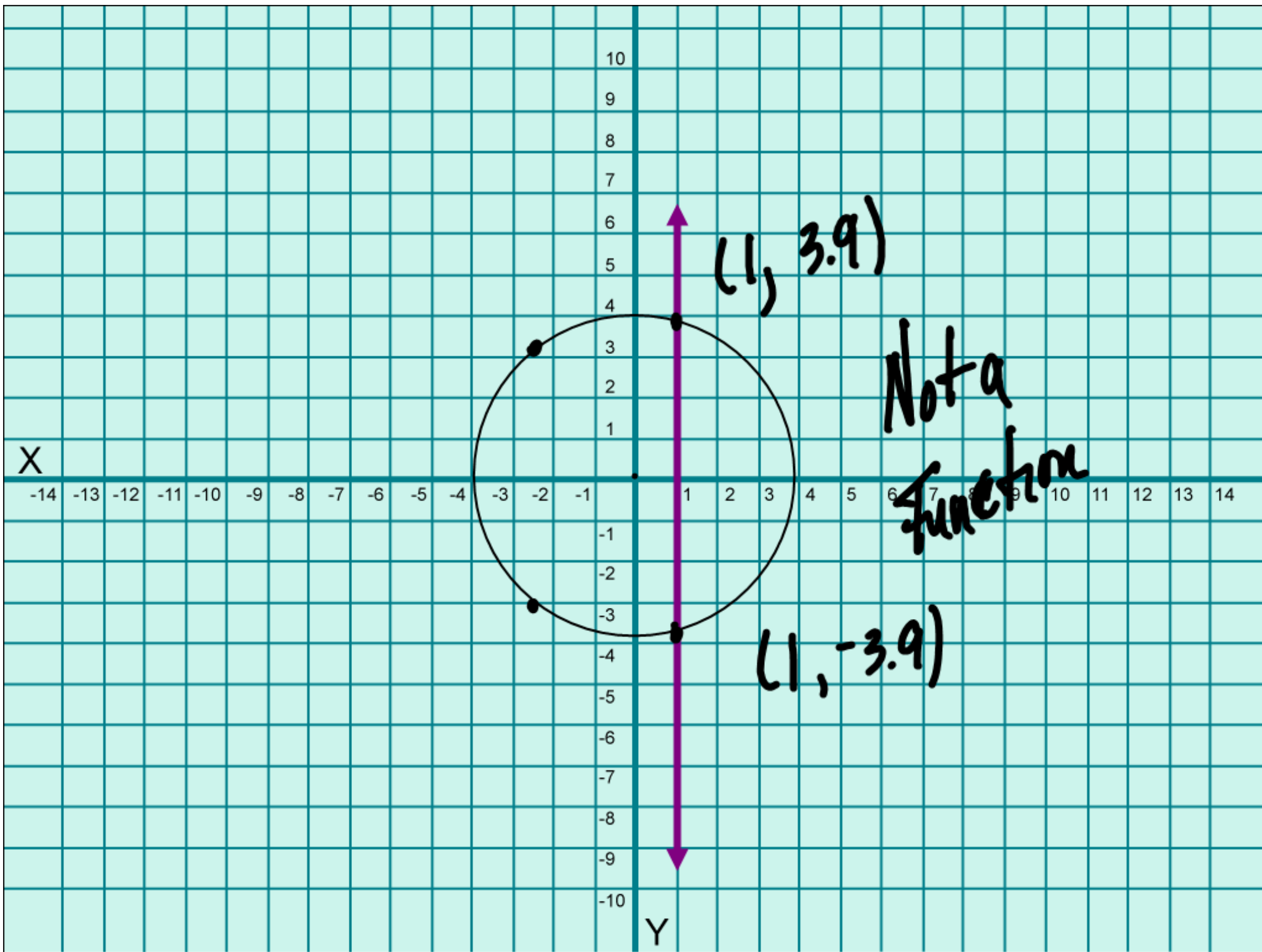
Vertical Line
Test



10
9
8
7
6
5
4
3
2
1
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10

Y





x	y
0	10
1	30
2	50
3	70
4	90

$y = 20x + 10$

$\frac{20}{1}$

p 224 14-32 E