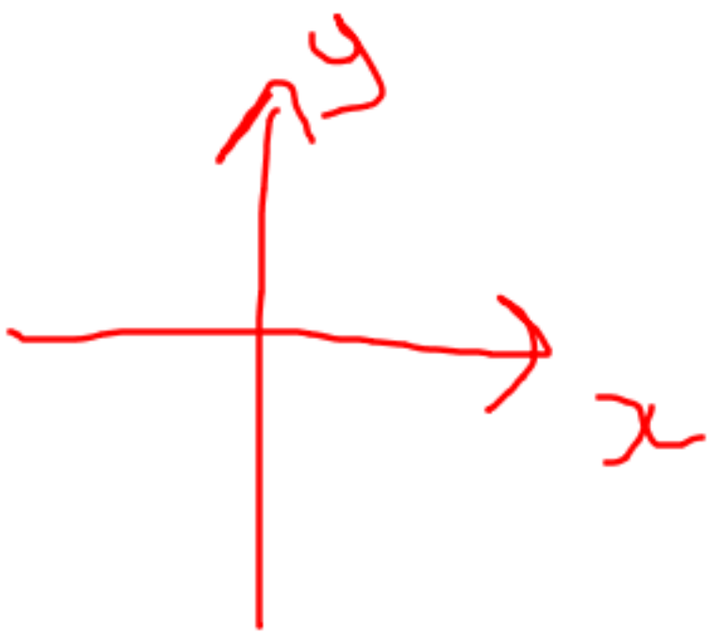
P. 243

April 17

x y

2. a) (2, 6) (3, 9) (5, 15) (8, 24)



Domain 2, 3, 5, 8
x-values

Range 6, 9, 15, 24
y-values

b) you multiply the domain by 3 to get the range

4. $\overset{x}{(4}\ \overset{y}{9)}\ (5,9)\ (7,9)\ (21,9)$

domain: 4, 5, 7, 21

range: 9

the domain can be any number,
but the range is limited to 9.

6. $x+y=4$

a the sum of the domain t range is 4.

x	y	
2	2	(2, 2)
1	3	(1, 3)
0	4	(0, 4)
−1	5	(−1, 5)
−2	6	(−2, 6)

Range 2, 3, 4, 5, 6

9. $s - t = 3$

s	t
4	1 $(4, 1)$
3	0 $(3, 0)$
2	$2 - (-1)$
1	$1 - (-2)$
0	-2 $(1, -2)$
	-3 $(0, -3)$

The difference of the domain minus range is 3.

Range: $1, 0, -1, -2$

10. $y = 4x + 2$ Four times the domain plus 2 equals the range

$4(2) + 2$

x	y	
2	10	(2, 10)
1	6	(1, 6)
0	2	(0, 2)
-1	-2	(-1, -2)
-2	-6	(-2, -6)

Range: 10, 6, 2, -2, -6

13. $y = -x - 2$

$-(-4) - 2$

$-(-3) - 2$

x	y
-4	$2 \quad (-4, 2)$ $-(-2) - 2$
-3	$1 \quad (-3, 1)$ $-(-1) - 2$
-2	$0 \quad (-2, 0)$
-1	$-1 \quad (-1, -1)$
0	$-2 \quad (0, -2)$

Negative times the domain minus 2 = the range

Range 2, 1, 0, -1, -2

14. a) $x+y=8$

(1, 7) c) (-5, 13) e) (10, -2)

15 a) $x-y=2$

(5, 3) c) (-3, -5)

e) (2, 0)

$-3-(-5)$

$-3+5$

2

16. $x+y=11$

x	y
2	9
1	10
0	11
-1	12
-2	13

19. $y=-2x-7$

$2(-1)-7$

$-2-7$

x	y
2	-3
1	-5
0	-7
-1	-9
-2	-11

20.

x	y
1	8
2	7
3	6
4	5

$x+y=9$

25.

Time(h)	Distance(km)	
1	80	(1, 80)
2	160	(2, 160)
3	240	(3, 240)
4	320	(4, 320)
5	400	(5, 400)
6	480	(6, 480)

Distance: Speed times Time

$D = ST$

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