9

a) $\mathbb{R}$

b) $\mathbb{R}$

c) yes

10

a) $\mathbb{R}$

b) $y \leq 4$

c) yes

11

a) parallel

b)

c)

12

a) $-4 \leq x \leq 1$

b) $-2 \leq y \leq 2$

c) NO

13

a) $\mathbb{R}$

b) $y = 3$

c) yes

14

a) $-4 \leq x \leq 3$

b) $-3 \leq y \leq 4$

c) yes

15

a) -29

b) 3

c) $-x^2 - 4x + 3$

d) -16

16

a) $x = 3$

b) $\mathbb{R}$

c) NO

17

a) $\mathbb{R}$

b) $\mathbb{R}$

c) yes

18

a) $\mathbb{R}$

b) $y \geq -1$

c) yes

19

a) $y = 50 - 5x$

b) 7 days

c)

20

a) $y = 30{,}000 - 2000x$

b) 20,000 ft

c)

Linear reg. problems

4) $y = .43x + 1.90$

≈ 14.8 yrs.

5) $y = -7.65x + 81.35$

RELATIONS, FUNCTIONS, DOMAIN & RANGE

First, let's review some basic information:

- Domain is the set of all _____ Range is the set of all _____
- Given a continuous graph (connected lines or curves):
  - Scan the graph _____ for domain!
  - Scan the graph _____ for range!
- To be a function, a relation must not repeat any _____.
- When given a graph, use the _____ to determine if it's a function.

Record your answers to the task cards below.

1

a) $\{-5, -3, 0, 2\}$

b) $\{-7, 0, 2, 4\}$

c) yes

2

a) $(4, 0)$

b) $(0, -3)$

c) _____

3

a) $y = -3x + 1$

b) _____

c) _____

4

a) $\{-3, 0, 6\}$

b) $\{-2, 1, 2, 8\}$

c) NO

5

a) $2x - 7 = 7$

b) $x - 8y = -12$

c) _____

6

a) $\{-2, 0, 2\}$

b) $\{1, 5\}$

c) yes

7

a) $\{-4, -2, 0, 4\}$

b) $\{-1, 0, 1, 4\}$

c) yes

8

a) $y = -\frac{7}{2}x + 5$

b) _____

c) _____