# QUIZIZZ

**Homework 4.1**

30 Questions

1.  Find the missing terms for the following: 5, 10, ___, ___, ___, 30, ...

☐ a) 20, 40, 80                    ☐ b) 15, 20, 25

☐ c) 16, 20, 24                    ☐ d) -15, 20, -25

2.  Write the recursive formula in function notation for the following sequence: 30, 24, 18,...

☐ a) f(x) = -6x + 36               ☐ b) f(x) = -6x +30

☐ c) f(x) = f(n-1) -6, f(1) = 30   ☐ d) f(x) = f(n-1) +6, f(1) = 30

3.  Is the following discrete or continuous & linear or exponential: To meet the demands placed on them, the brick layers have started laying 5% more bricks each day.

☐ a) Discrete & Linear             ☐ b) Continuous & Linear

☐ c) Discrete & Exponential        ☐ d) Continuous & Exponential

4.  Find the slope of the following points & write the equation in point-slope form: (16,10) and (17,16)
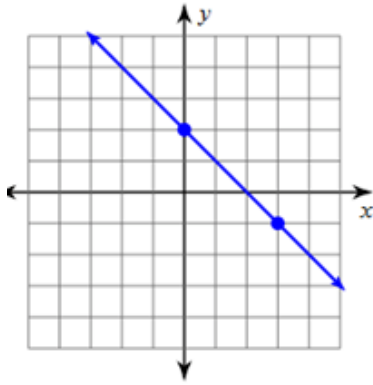
☐ a) m = 6 ; y - 16 = 6 (x - 10)   ☐ b) m = 1/6 ; y - 10 = 1/6 (x - 16)

☐ c) m = -6 ; y - 10 = -6 (x - 16) ☐ d) m = 6 ; y - 10 = 6 (x - 16)

**5.**



Write the equation of the following line in slope-intercept form.

☐ a) y = 2x -1

☐ b) y = 2x + 2

☐ c) y = -x -2

☐ d) y = -x + 2

**6.**

Find the slope given the table

| x | y |
|---|---|
| 2 | 3 |
| 2 | 4 |
| 2 | 5 |
| 2 | 6 |
| 2 | 7 |

☐ a) undefined

☐ b) no slope

☐ c) 2

☐ d) 1/2

**7.** Solve the following for x: 2x - 3 = 45 - 4x

☐ a) x = 21

☐ b) x = - 8

☐ c) x = 7

☐ d) x = 8

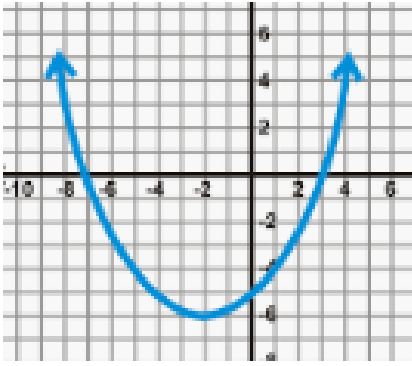**8.** Find the x-intercept & y-intercept of the following: 2x - 3y = - 36

☐ a) x-int: (12, 0) ; y-int: (0, -18)

☐ b) x-int: (-12, 0) ; y-int: (0, 18)

☐ c) x-int: (18, 0) ; y-int: (0, -12)

☐ d) x-int: (-18, 0) ; y-int: (0, 12)

9.



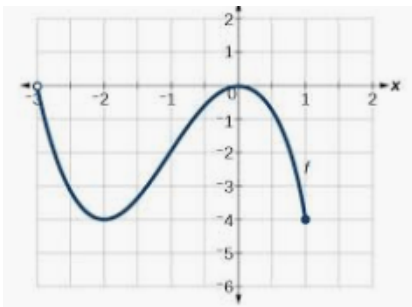What is the domain and range of the following:

☐ a) $D: (-\infty, \infty)$ ; $R: (-\infty, \infty)$

☐ b) $D: (-\infty, \infty)$ ; $R: (\infty, -6)$

☐ c) $D: (-\infty, \infty)$ ; $R: (-6, \infty)$

☐ d) $D: (-6, \infty)$ ; $R: (-\infty, \infty)$

10.



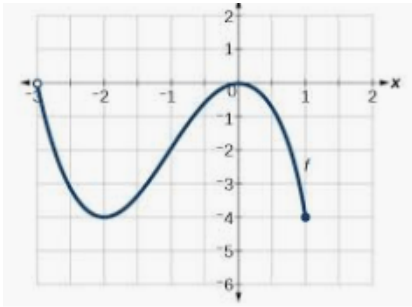Find the x-intercept(s) & y-intercept(s) of the following the graph:

☐ a) x-int: (-3, 0), (0,0) ; y-int: (0,0)

☐ b) x-int: (3, 0) ; y-int: (0,0)

☐ c) x- int: (0, 0) ; y-int: (-3, 0) & (0,0)

☐ d) x-int: (0,0) ; y-int: (0,0)

11.



What is the interval of increasing for the following:

☐ a) (0, 2)

☐ b) (-4, 0)

☐ c) (-2, 0)

☐ d) [-2, 0]

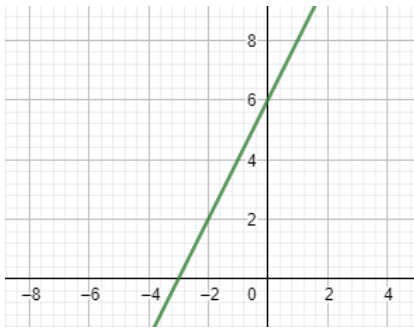12. This occurs when the x-value is 0:

☐ a) x-intercept

☐ b) y-intercept

13. A relation is always a function.

☐ a) True

☐ b) False
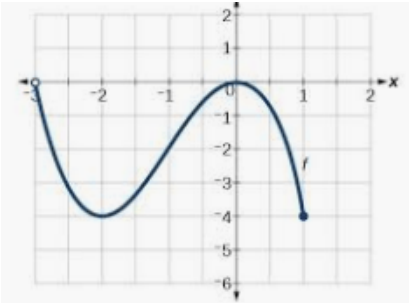
14.



What is the equation of the following graph:

☐ a) y = 6x + 2

☐ b) y = -2x + 6

☐ c) y = 2x + 6

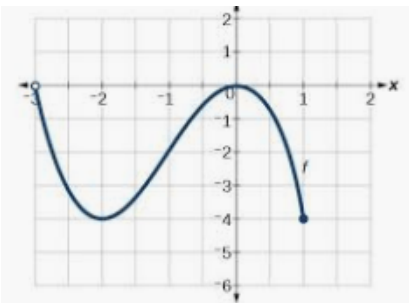☐ d) y = 6x + 6

15.



What is f(-1)

☐ a) -1

☐ b) -2

☐ c) -4

☐ d) 0

16.



What is x when f(x) = -4

☐ a) 0

☐ b) -2

☐ c) -4

☐ d) -2 & 1

17.  Solve : 243 - 8x = 8x +3

☐ a) x = 15.375

☐ b) No Solution

☐ c) x = 0

☐ d) x = 15

18.  Solve: 3x - 12 = -4x + 23

☐ a) x = 5

☐ b) x = - 5

☐ c) x = 35

☐ d) x = - 35

19.

$$5^x - 7 = 118$$

Describe the following equation:

- [ ] a) Linear
- [ ] b) Exponential
- [ ] c) Quadratic
- [ ] d) Nonlinear

20.

$$5^x - 7 = 118$$

Solve for x:

- [ ] a) x = 25
- [ ] b) x = 120
- [ ] c) x = 5
- [ ] d) x = -5

21. Which of the following have a domain of all real numbers?

- [ ] a) Linear
- [ ] b) Exponential
- [ ] c) Quadratic
- [ ] d) All the above

22. Which of the following has a range that is determined by an asymptote?

- [ ] a) Linear
- [ ] b) Quadratic
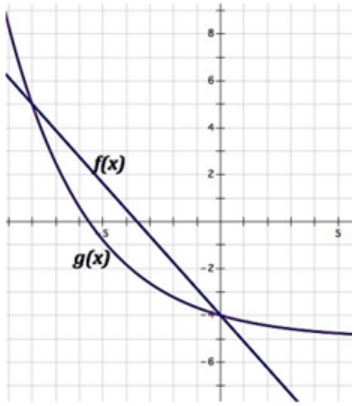- [ ] c) Exponential
- [ ] d) All the above

23. Solve the following for **x**: ax + by = c

- [ ] a)
$$x = c - by - a$$

- [ ] b)
$$x = \frac{c + a}{by}$$

- [ ] c)
$$x = \frac{c + by}{a}$$

- [ ] d)
$$x = \frac{c - by}{a}$$

Solve: 3x - 17 = -53

24.
- [ ] a) x = 12
- [ ] b) x = -39
- [ ] c) x = -33
- [ ] d) x = -12

**25.**



On what interval is f(x) > g (x)

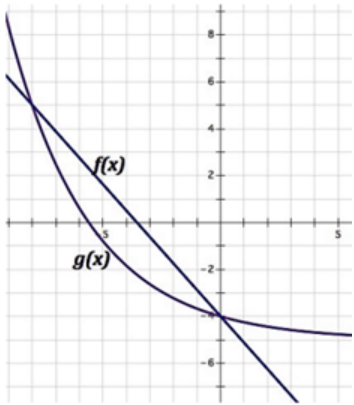☐ a) (5, - 4)     ☐ b) (-4, 5)

☐ c) (8, 0)     ☐ d) (-8, 0)

**26.**



Where does f(x) = g(x)

☐ a) (5, -8) & (0, -4)     ☐ b) (-5, 8) & (-4, 0)

☐ c) (-8, 5) & (0, -4)     ☐ d) (8, -5) & (-4, 0)

**27.**     Solve for x

$$\frac{1}{3}x - 12 = -8$$

☐ a) 6.6     ☐ b) -60

☐ c) x = -12     ☐ d) x = 12

**28.**     Solve for x:

$$4 - \frac{2}{7}x + 12 = 0$$

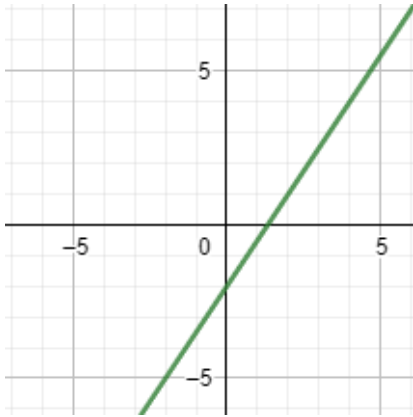☐ a) -28     ☐ b) 28

☐ c) 56     ☐ d) -56

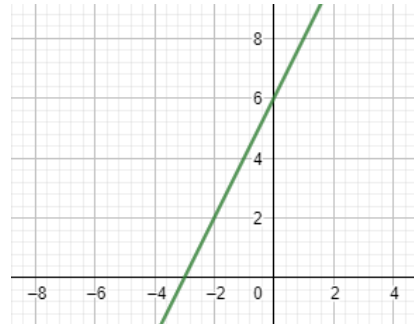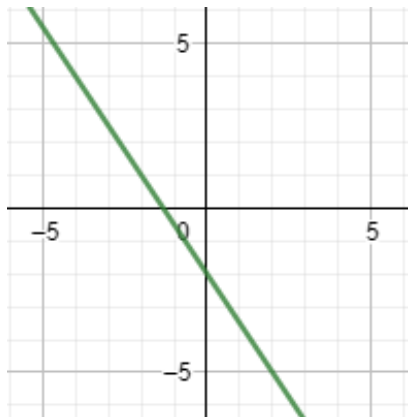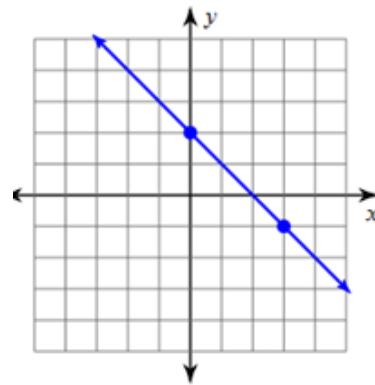29.                                    Graph the following:

$$y = \frac{3}{2}x - 2$$

☐ a)



☐ b)



☐ c)



☐ d)



30.  Solve the following: 12(2y + 11) = 12 (2y +12)

☐ a) Infinite Solutions                    ☐ b) y = 2

☐ c) y = 5.75                              ☐ d) No Solution