T-1 Rev B Multiple Choice Review for T-1 Benchmark Exam Algebra 1H

Do in spiral and show all support work!

1) What is the solution of 4(3x-2) - (4x-3) = 11 A) 1 B) $1\frac{1}{4}$ C) $\frac{4}{3}$ D) 2 2) Which point is *not* on the line? 6x - 8y = -2 A) (1, 1) B) $(\frac{1}{3}, \frac{1}{2})$ C) (2, 2) D) (0.5, 0.625)

3) Which point is on the line? $y = \frac{3}{4}x - 5$ A) (4,7) B) (4,-2) C) (0,5) D) (-5,0)

4) What is the equation of the line that passes through the point (3, -1) and is perpendicular to the line 2x - 4y = 8?

A) 2x - y = 7 B) x + 2y = 1 C) 2x + y = 5 D) x - 2y = 5

5) What is the domain of the function given by $\{(5,0), (-1,2), (3,2), (6,7)\}$? A) $\{0,2,7\}$ B) $\{-1,2,5,7\}$ C) $\{2,3,6,7\}$ D) $\{-1,3,5,6\}$

6) What is the solution for the equation 3(y+2) - 4(2y-1) = 8 A) $-\frac{9}{5}$ B) $-\frac{2}{5}$ C) $\frac{2}{5}$ D) $\frac{9}{5}$

7) What is the solution for the equation? $\frac{4}{5}x + \frac{7}{5}x = \frac{33}{10}$ A) $\frac{363}{50}$ B) 3 C) $\frac{3}{2}$ D) $\frac{2}{3}$

8) A movie discount pass, which has an annual fee of \$50, allows a moviegoer to pay \$6 per movie. If a movie ticket normally costs \$8.50, how many movie tickets must a moviegoer buy to make the discount pass a bargain?

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A) at least 25 B) more than 20 C) 20 or fewer D) more than 19
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9) What is the solution for the equation? 2.96 = 0.08(x - 4) A) 4.1 B) 33 C) 41 D) 87
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10) What is the equation of the line that passes through the point (1, 4) and is parallel to the graph of 2x - y = 9?

A) 2x - y = -2 B) 2x - y = 4 C) 2x + y = 6 D) x + 2y = 9

11) Which ordered pair represents where the graph of 5x - 2y = 10 intersects the y-axis?A) (0, -5)B) (-5, 0)C) (0, 2)D) (2, 0)12) Which relation is a function?A) $\{(0,1), (0,2), (2,3), (3,2)\}$ B) $\{(2,4), (3,5), (4,6), (5,6)\}$ C) $\{(3,1), (1,3), (2,1), (2,3)\}$ D) $\{(5,2), (5,3), (2,2), (3,3)\}$

13) In the equation t = 2000p, where tons are a function of pounds, what does t represent?

A) the dependent variableB) the independent variableC) the interceptD) the slope

14) What is the y-intercept for the equation? 6x - 2y = -4 A) -2 B) $-\frac{2}{3}$ C) 2 D) $\frac{1}{2}$

- 15) Which statement is true about the relationship between the domain (D) and the range (R) of a function?A) For every element in D, there is only one corresponding element in R.
 - B) For every element in R, there is only one corresponding element in D.
 - C) There must be the same number of elements in D and R.
 - D) The elements of D are the dependent variables.
- 16) Which situation is most likely represented by the graph?
 - A) amount of tip money earned by a waiter every night
 - B) price of a stock on the stock market
 - C) wages paid to an hourly employee at a factory
 - D) daily commissions earned by a real estate agent
- 17) What is the slope of the line? 2x + 3y = 6 A) 2 B) $-\frac{3}{2}$ C) $-\frac{2}{3}$ D) -2
- 18) Which ordered pair represents the x-intercept of the line? 4x 3y = 12A) (0, 3) B) (3, 0) C) (0, -4) D) (-4, 0)
- 19) What is the equation of the line that passes through the point (3, 2) and has a slope of $-\frac{2}{3}$?

Temperature

A)
$$y-2=\frac{2}{3}(x-3)$$
 B) $y-3=\frac{2}{3}(x-2)$ C) $y-2=-\frac{2}{3}(x-3)$ D) $y-3=-\frac{2}{3}(x-2)$

20) On a scatter plot, the x-axis represents the latitude from the equator to the North Pole and the yaxis represents the average temperature.

Which type of correlation is represented?

- A) positive correlation
- B) negative correlation
- C) no correlation
- D) none of the above



21) The graph of a linear function contains the following data points. What is the slope of the line?

A) _2	1 <u>8</u> B)	$\frac{1}{5}$
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Number of cars	Car wash		
5	\$25		
10	\$50		
15	\$75		
20	\$100		
25	\$125		



Answer Key	3) B	7) C	11) A		21) C
	4) <i>C</i>	8) B	12) A	18) C	22) B
	5) D	9) C	13) B		23) C
1) D			14) A	19) C	
2) C	6) C		15) C		
			16) A	20) B	