ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Algebra and Geometry **Class: 7** **Date: 10.07.20**

Duration: 40 min **Worksheet 53** **Full Marks: 15**

GRAPHS

Choose the Correct options:

1. **What algebraic equation shows the relationship between the independent and dependent variables?**
   (a) y = ax
   (b) y = x + 12
   (c) y = -3x
   (d) y=5

x	y
-3	9
-2	6
-1	3
0	0
1	-3
2	-6
3	-9

2. **Which equation matches the table?**
   (a) y = x
   (b) y = 5x
   (c) y = x - 4
   (d) y = x + 4

x	y
2	6
1	5
0	4
-1	3
-2	2

3. **Which equation matches the table?**
   (a) y = x + 5
   (b) y = 5x
   (c) y = x - 5
   (d) x = y – 5

x	y
0	5
1	6
2	7
3	8
4	9

4. **Nancy can type 50 words per minute. Look at the table below to write an equation that matches the data.**
   (a) m=50 + w
   (b) w= 50m
   (c) w= 50 + m
   (d) m= 50 – w

Minutes (m)	Words (w)
1	50
2	100
3	150

5. **y = x - 6**
   What is the missing number?
   (a) 12
   (b) 10
   (c) 14
   (d) 13

x	y
21	15
18	
15	9
13	7
11	5

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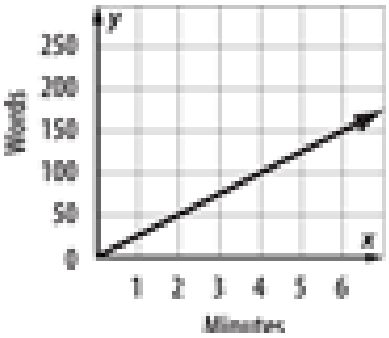
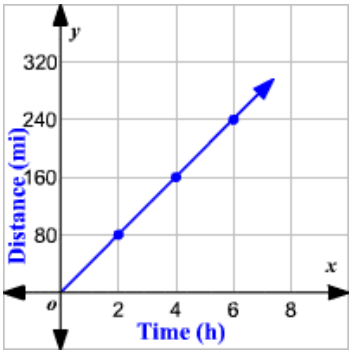
6. **Choose the best explanation**
   (a) Taylor can write 6 words per minute
   (b) Taylor can write 25 words per minute
   (c) Taylor can write 50 words per minute
   (d) Taylor can write 150 words per minute



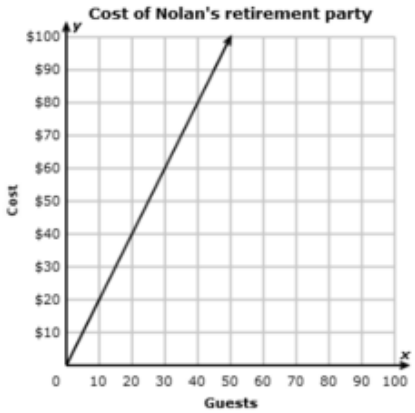
7. **What is the rate of change (unit rate) for the following graph?**
   (a) 80
   (b) 20
   (c) 40
   (d) 160



8. **What is the constant of proportionality (in miles per hour) based on the table?**
   (a) 45
   (b) 90
   (c) 135
   (d) 2

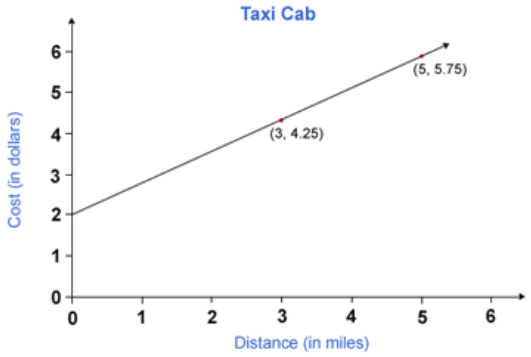
Time (hours)	Distance (miles)
2	90
3	135
5	225
6	270

9. **Is the graph proportional or non proportional?**
   (a) proportional
   (b) non proportional
   (c) both
   (d) neither



10. Is the graph proportional or non proportional?

(a) proportional
(b) non proportional
(c) both
(d) neither



11. What is the constant of Proportionality for this table?

Hours	Money
0	$0
1	$9
2	$18
3	$27
4	$36

(a) 1/9
(b) 9
(c) 8

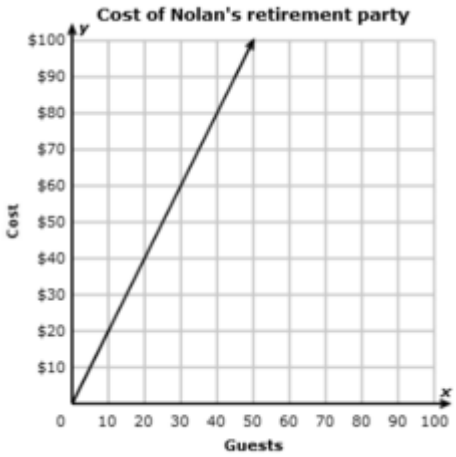
12. What is the function of the table?

(a) y=3x+1
(b) y=4x-2
(c) y=x+1
(d) y=x+7

x	y
0	1
3	10
4	13
5	16
6	19

13. What is the equation of the line?

(a) y = 20x
(b) y = x + 20
(c) y = 2x
(d) y = x + 2



14. You earn $18 for every hour you work. Which equation represents this function?

(a) y=(18/2)x + 0
(b) y = 18x
(c) y = 2x + 18
(d) y = 18x + 2

15. Bob has $150 in his savings account and saves $40 per month.

(a) 150 + 40
(b) 40x + 150
(c) 150x + 40
(d) 40x + 15