

Assessment #11: Slope Assessment

1. Which equation represents the line that passes through the points (4, 5) and (-3, -2)?

☐ $y = -3x + 17$

☐ $y = 3x - 7$

☐ $y = -x + 9$

☐ $y = x + 1$

2. Line ℓ contains the points given in the table below.

x	y
1	2
2	8
3	14

If the slope of line m is $\frac{1}{2}$ the slope of line ℓ , which of the following tables contains three points that

☐

x	y
1	2
2	4
3	7

☐

x	y
1	2
2	6
3	9

☐

x	y
1	2
2	5
3	8

☐

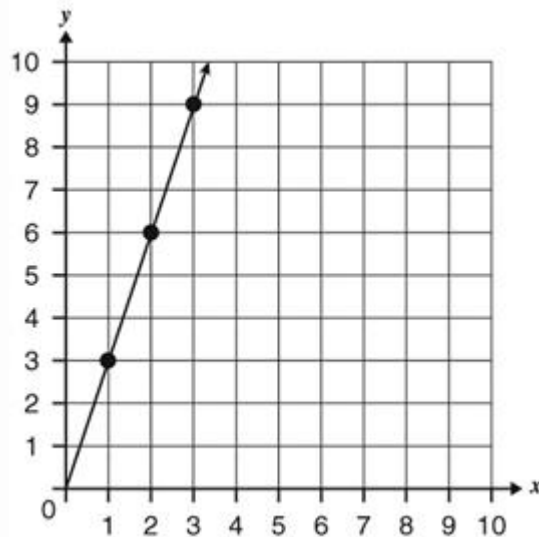
x	y
1	1
2	7
3	13

3. The table below shows the relationship between the number of tickets sold for a concert and a theater's net profit, in dollars. What is the rate of change and what the rate of change represents in this situation.

Concert Profit	
Tickets Sold	Net Profit (\$)
150	-500
200	0
225	250
400	2,000

- ☐ The rate of change can not be determined from the table above.
- ☐ The rate of change is $\frac{1}{10}$. This means every 1 ticket sold produces a net profit of \$10.00.
- ☐ The rate of change is 10. This means every 1 ticket sold produces a net profit of \$10.00.
- ☐ The rate of change is 10. This means every 10 tickets sold produces a net profit of \$1.00.

4. Which equation BEST represents the graph below?



- ☐ $y = x + 3$
 - ☐ $y = 3x$
 - ☐ $y = x + 2$
 - ☐ $y = 0$
-

5. The function table below follows a function rule.

x	y
1	0.5
2	0
3	-0.5
4	-1
5	
10	

Part A: Complete the table by filling in the two missing numbers.

Part B: Based on the table, write a function rule that represents the relationship between x and y .

Part C: Describe in 3-4 sentences how you determined the function rule.

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6. Which algebraic equation represents the relationship between x and y in the table below?

x	y
1	5
2	7
3	9
4	11

☐ $y = x + 4$

☐ $y = x + 2$

☐ $y = 2x + 3$

☐ $y = 3x + 1$

7. Consider the three points $(-7, -7)$, $(21, 14)$, $(49, 35)$.

Part A:

Which of the following points are on the same line that passes through the $(-7, -7)$, $(21, 14)$, $(49, 35)$? Select all that apply.

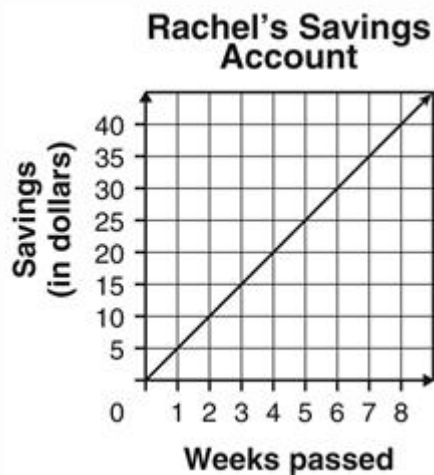
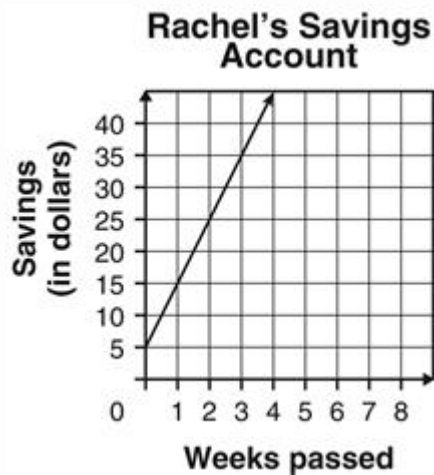
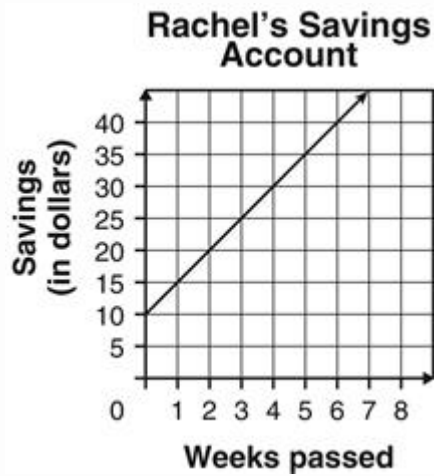
- A. (5, 9)
- B. (5, 2)
- C. (17, 11)
- D. (4, 3)
- E.) (33, 23)

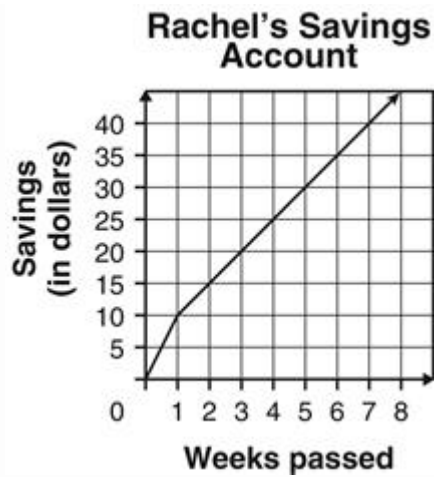
Part B:

Show or explain how you determined which points were on the line and which were not on the line.

This image shows a full page of a handwriting practice worksheet. It features 20 horizontal dashed lines spaced evenly down the page, providing a guide for letter height and placement. The background is white, and the lines are light gray or black, depending on the resolution. There is no text or other markings on the page.

8. Rachel starts with \$10 in her savings account. When one week has passed, she plans to have added \$5 to her account. She will continue to add \$5 each week after that. Which graph represents the amount in her account over time?





9. The equation $c = 25m + 200$ can be used to find c , the cost of joining a gym, where m represents the months of a membership. How would the graph of the equation change if $25m$ changed to $30m$ in the

- ☐ The graph would be flatter.
- ☐ The graph would shift up on the y -axis.
- ☐ The graph would be steeper.
- ☐ The graph would shift down on the y -axis.

10. Which value represents the slope of the line that has an x -intercept at $(-4, 0)$ and a y -intercept at $(0, 3)$ in the coordinate plane?

- ☐ -3
- ☐ $-\frac{1}{3}$
- ☐ $\frac{1}{3}$
- ☐ 3

11. Kelsie gets paid by her employer at a constant rate per hour. Which table could represent the amount Kelsie was paid during the last 4 weeks?

Kelsie's Pay

Number of Hours Worked	Amount Paid
40	\$400
25	\$400
34	\$400
46	\$400

Kelsie's Pay

Number of Hours Worked	Amount Paid
40	\$400
25	\$420
34	\$440
46	\$460

Kelsie's Pay

Number of Hours Worked	Amount Paid
40	\$250
25	\$340
34	\$400
46	\$460

Kelsie's Pay

Number of Hours Worked	Amount Paid
40	\$400
25	\$250
34	\$340
46	\$460

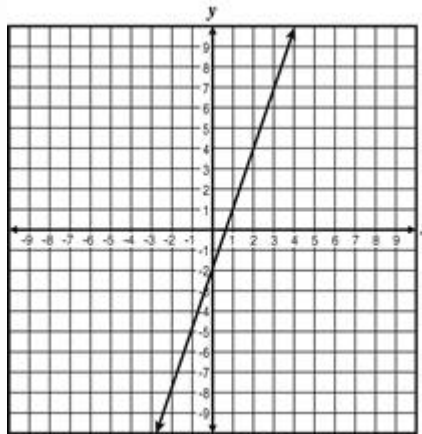
12. Which equation represents the line that passes through the points (4, 10) and (2, 7)?

- ☐ $y = -\frac{3}{2}x + 19$
- ☐ $y = -\frac{3}{2}x + 16$
- ☐ $y = \frac{3}{2}x - 11$
- ☐ $y = \frac{3}{2}x + 4$

13. A plumber charges a fixed fee of \$50 plus \$60 per hour for repairs. The plumber makes repairs for the constant rate in this situation?

- ☐ the \$60 per hour the plumber charges
 - ☐ the \$50 fixed fee the plumber charges
 - ☐ the 6 hours the plumber makes repairs
 - ☐ the \$410 total the plumber charges
-

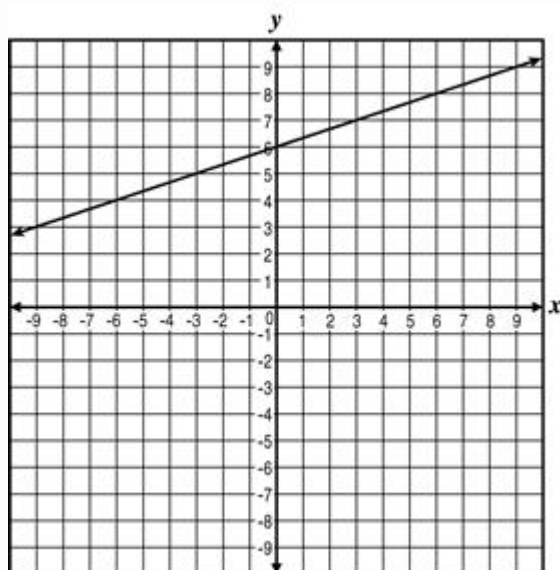
14. The graph of a function is shown below.



Which of the equations below represents this function?

- ☐ $f(x) = 2x + 2$
 - ☐ $f(x) = 3x - 2$
 - ☐ $f(x) = 2x - 2$
 - ☐ $f(x) = 3x + 2$
-

15. Which equation is BEST represented by the graph shown below?



- ☐ $y = 6x + \frac{1}{3}$
- ☐ $y = -\frac{1}{3}x - 6$
- ☐ $y = \frac{1}{3}x + 6$
- ☐ $y = -6x + \frac{1}{3}$

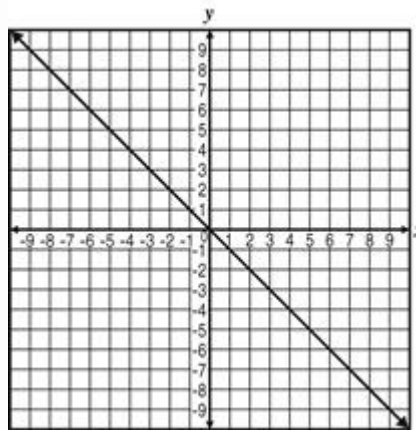
16. Which set of ordered pairs represents the x- and y-intercepts of the graph of $y = 4x + 12$?

- ☐ (3, 0) and (0, 12)
 - ☐ (3, 0) and (0, -12)
 - ☐ (-3, 0) and (0, -12)
 - ☐ (-3, 0) and (0, 12)
-

17. The cost of an ice cream cone is measured by the formula $c = 0.75x + 0.25$, where x is the number cream and c is the cost. According to the formula, how much should it cost to buy an ice cream cone cream?

- ☐ \$0.25
- ☐ \$0.75
- ☐ \$0.00
- ☐ \$1.00

18. Which function is represented by this graph?



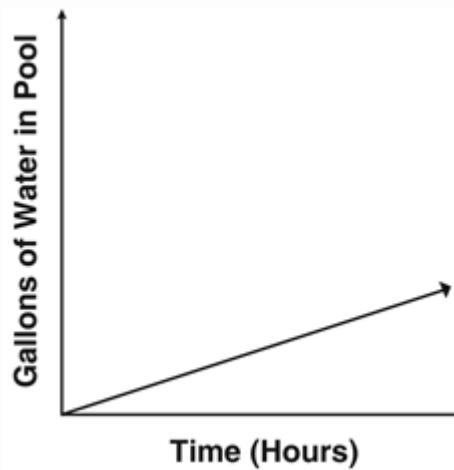
- ☐ $y = -x$
- ☐ $y = -x - 1$
- ☐ $y = x + 1$
- ☐ $y = x$

19. The cost to belong to a gym is \$25 each month and a one time fee of \$100 to join.

What is the slope and the y-intercept in this situation.

- ☐ The slope can not be determined in this problem.
The y-intercept is the one time fee to join.
- ☐ The slope is the one time fee to join.
The y-intercept can not be determine in this problem.
- ☐ The slope is the cost of the gym each month.
The y-intercept is the one time fee to join.
- ☐ The slope is the the one time fee to join.
The y-intercept is the cost of the gym each month.

20. **Thomas is filling his backyard pool with water as modeled in the graph.**



Based on the graph, which of the following is the dependent quantity?

- ☐ number of days
 - ☐ gallons of water
 - ☐ rate of the water flow
 - ☐ time in hours
-

21. The equation $y = 2x + 1.25$ represents the cab fare charged by Ivan's Cab Company, where y is the fare and x is the number of miles traveled. How would the graph change if $y = 1.25x + 2$ represented the cab fare?

- ☐ The graph would start lower on the y -axis and would be flatter.
- ☐ The graph would start higher on the y -axis and would be flatter.
- ☐ The graph would start higher on the y -axis and would be steeper.
- ☐ The graph would start lower on the y -axis and would be steeper.

22. Which equation expresses the relationship between x and y , as shown in the accompanying table?

x	0	1	2	3	4
y	2	5	8	11	14

- ☐ $y = x + 2$
- ☐ $y = 2x + 3$
- ☐ $y = x + 3$
- ☐ $y = 3x + 2$

23. Which equation represents the line that passes through the points $(4, 7)$ and $(-2, -2)$?

- ☐ $y = -\frac{5}{2}x + 17$
- ☐ $y = \frac{3}{2}x + 1$
- ☐ $y = -\frac{3}{2}x + 13$
- ☐ $y = \frac{5}{2}x - 3$