

Algebra 1

Practice Chapter 3 Test

NAME _____

Write the letter for the best answer in the blank at the right. (3 Points)

Determine whether the equation is linear to #1 and #2. If so, write the equation in standard form.

1. $3y = 5x - 9$

A. Yes; $5x + 3y = -9$

B. Yes; $5x - 3y = 9$

C. Yes; $5x - 3y = -9$

D. Not Linear

2. $\frac{2}{5}y = \frac{1}{3}x + 4$

A. Yes; $-5x + 6y = 60$

B. Yes; $5x - 6y = 60$

C. Yes; $5x - 6y = -60$

D. Not Linear

3. What is the x -intercept of $3x - 4y = 12$

A. 3

B. 4

C. -3

D. -4

4. What is the y -intercept of $3x - 4y = 12$

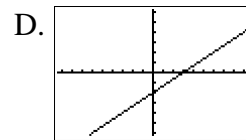
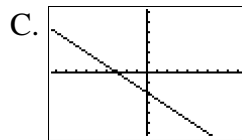
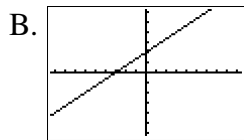
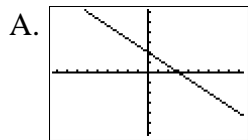
A. 3

B. 4

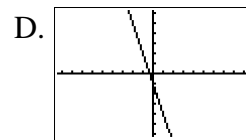
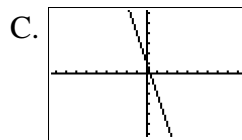
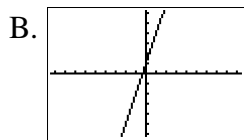
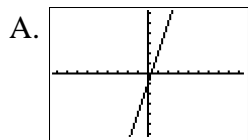
C. -3

D. -4

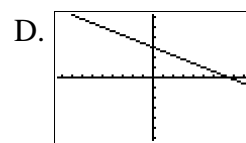
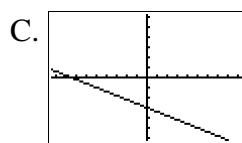
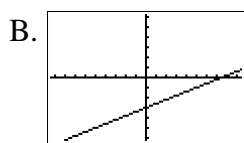
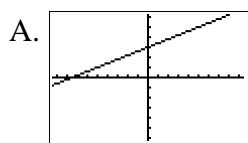
5. Which graph is the equation $2x - 3y = 6$ when the x and y intercepts are used.



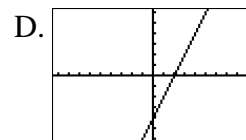
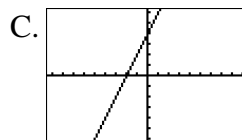
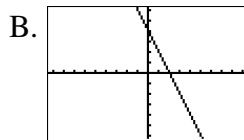
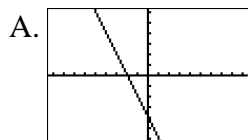
6. Graph $y = 3x + 1$ by making a table.



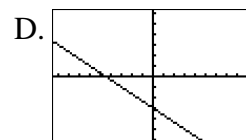
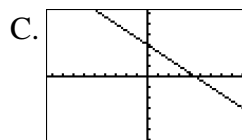
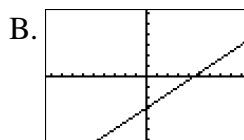
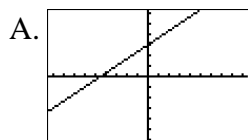
7. Graph $5y = 2x - 15$ by making a table.



8. Graph $y = 2x - 4$ by making a table.



9. Graph $3y = -2x - 9$ by making a table.



1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

Points(27) _____

10. Graph $y = 3x - 6$ and determine its solution.

- A. 2 B. 3 C. -6 D. 12

11. Graph $y = -4x - 4$ and determine its solution.

- A. 4 B. -1 C. 2 D. \emptyset

12. Graph $y = \frac{1}{3}x - 4$ and determine its solution.

- A. $\frac{3}{4}$ B. -7 C. 10 D. 12

For #13-23, find the slope of the two points.

13. (3, 5), (6, 1)

- A. 5 B. $-\frac{4}{3}$ C. $\frac{1}{6}$ D. -6

14. (-2, 6), (-4, -2)

- A. 3 B. 4 C. $\frac{1}{3}$ D. -3

15. (5, 7), (3, 2)

- A. 5 B. $\frac{2}{5}$ C. $\frac{5}{2}$ D. No Slope

16. (-7, 6), (-7, -1)

- A. 4 B. $-\frac{3}{2}$ C. 0 D. No Slope

17. (-10, 2), (-8, 5)

- A. $\frac{3}{2}$ B. $\frac{5}{3}$ C. $\frac{6}{5}$ D. $\frac{2}{3}$

18. (9, -5), (-4, -5)

- A. 3 B. $\frac{16}{19}$ C. 0 D. No Slope

19. (3, 5), (-2, 6)

- A. $-\frac{3}{5}$ B. $-\frac{5}{3}$ C. $-\frac{1}{5}$ D. 17

20. (-4, -2), (-7, -4)

- A. $\frac{2}{3}$ B. $\frac{1}{6}$ C. $-\frac{3}{2}$ D. $\frac{7}{6}$

21. (-8, -2), (-6, -7)

- A. $\frac{2}{3}$ B. $-\frac{2}{3}$ C. $-\frac{5}{2}$ D. $\frac{5}{2}$

22. (4, -2), (-1, 1)

- A. $-\frac{5}{3}$ B. $\frac{5}{3}$ C. $-\frac{3}{5}$ D. $\frac{3}{5}$

23. (0, -10), (8, 0)

- A. $\frac{5}{4}$ B. $-\frac{5}{4}$ C. $\frac{8}{10}$ D. $-\frac{4}{5}$

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

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20. _____

21. _____

22. _____

23. _____

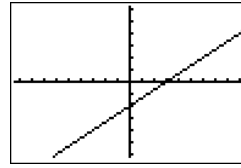
Points(42) _____

24. Determine the value of r so that the line through $(r, 4)$ and $(-7, 7)$ has a slope $(m) = \frac{3}{4}$

- A. -3 B. -11 C. 3 D. 9

25. Determine the slope of the line graphed to the right.

- A. $\frac{2}{3}$ B. $\frac{3}{2}$ C. $-\frac{3}{2}$ D. $-\frac{2}{3}$



26. What is the next term in the sequence 2, 5, 8, 11,

- A. 8 B. 12 C. 14 D. 18

27. What is the next term in the sequence 2, 4, 8, 16, 32,

- A. 48 B. 64 C. 128 D. 256

28. Determine which sequence is an arithmetic sequence.

- A. 4, 8, 12, 16 B. -7, -1, 3, 5
 C. $\frac{2}{5}, \frac{6}{5}, \frac{12}{5}, \frac{21}{5}$ D. 20, 16, 10, 2

29. Determine which sequence is NOT an arithmetic sequence.

- A. -8, 0, 8, 16 B. 7, 3, -1, -5
 C. $0, \frac{3}{2}, 3, \frac{9}{2}$ D. 1, 2, 4, 8

For questions #30 and #31, use $a_n = a_1 + (n - 1)d$ to help write an equation

30. Which equation describes the n th term of the arithmetic sequence 14, 25, 36, 47, 58,

- A. $a_n = -11n + 3$ B. $a_n = 3n - 11$
 C. $a_n = 11n + 3$ D. $a_n = 3n + 11$

31. Which equation describes the n th term of the arithmetic sequence 3, 11, 19, 26, 34,

- A. $a_n = -4n + 11$ B. $a_n = 8n - 5$
 C. $a_n = 4n + 11$ D. $a_n = -8n - 5$

32. Find the function that represents the relationship.

- A. $y = 8x$ B. $y = 6x + 4$
 C. $y = 8x + 14$ D. $y = 6x + 6$

x	0	1	2	3	4
y	4	10	16	22	28

33. Find the function that represents the relationship.

- A. $y = 4x$ B. $y = 4x + 3$
 C. $y = 4x + 2$ D. $y = 4x + 1$

x	2	3	4	5	6
y	9	13	17	21	25

24. _____

25. _____

26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

33. _____

Points(30) _____