

PRACTICE TEST 1, CHAPTER 2, 3*Beginning and Intermediate Algebra* by Elayn Martin-Gay, 6th edition

Simplify each expression.

1. $6x - 3y + 4x$

2. $-(s+7)$

3. $2-(3s+7)$

Solve each equation.

4. $-12 = -x + 7$

5. $\frac{8}{5}x = -24$

6. $2x + 13 = -1$

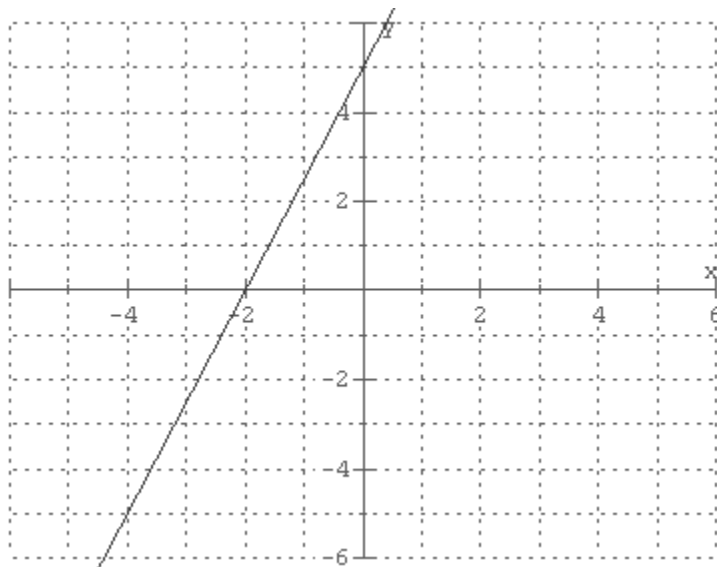
7. $2x - 4 = -3x + 1 - 6$

8. $8(2t + 1) = 4(7t + 7)$

Translate the words into an algebraic equation. Then solve the equation.

9. Three times a number, plus 1, is equal to twice the number, minus 6. Find the number.
10. Graph the line $y = -4x + 1$ by constructing a table of values with $x = -2, 0$ and 1 . Label the three points on the graph.
11. Graph the line $y = -x$ and label two points on your graph.
12. Graph the following equation by finding the x and y -intercepts. Label the intercepts on your graph. $3x - 4y = 12$
13. Graph the equation $y = 1$ and label two points on your graph.
14. Graph the equation $x = -4$ and label two points on your graph.
15. Find the slope of the line passing through the points $(-3, 0)$ and $(-3, -9)$.
16. Find the slope of the line passing through the points $(1, -2)$ and $(-4, 5)$.
17. Find the slope of the line passing through the points $(7, 2)$ and $(-7, 2)$.

18. What is the slope of the line shown below?



19. Find the slope of the line: $4x - 2y = 3$
20. Determine whether lines L_1 and L_2 are parallel, perpendicular or neither.
 $L_1: x + 3y = 6$ $L_2: 3x - y = 0$
21. Determine whether lines L_1 and L_2 are parallel, perpendicular or neither.
 $L_1: 2x + y = 0$ $L_2: y - 2x = -2$
22. Determine whether lines L_1 and L_2 are parallel, perpendicular or neither.
 $L_1: 5y + 5x = 10$ $L_2: x + y = 1$
23. Write an equation of the line whose slope $m = \frac{-1}{2}$ and whose y-intercept is $(0, 7)$.
24. Graph the equation of the line $y = \frac{3}{4}x - 1$ by the slope-intercept method.
Label two points on the line.
25. Find an equation of the line with slope $m = -5$ that passes through $(1, -1)$.
Write the equation in slope-intercept form $y = mx + b$.
26. Find an equation of the line through the points $(0, 3)$ and $(-4, 0)$.
Write the equation in slope-intercept form $y = mx + b$.

MATH 0304
PRACTICE TEST 1 ANSWERS

1. $10x - 3y$

2. $-s - 7$

3. $-3s - 5$

4. $x = 19$

5. $x = -15$

6. $x = -7$

7. $x = -\frac{1}{5}$

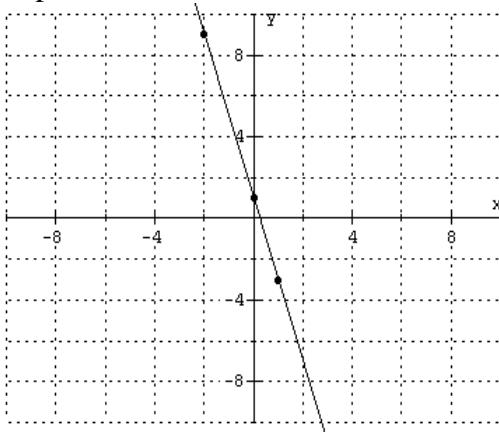
8. $x = -\frac{5}{3}$

9. $x = -7$

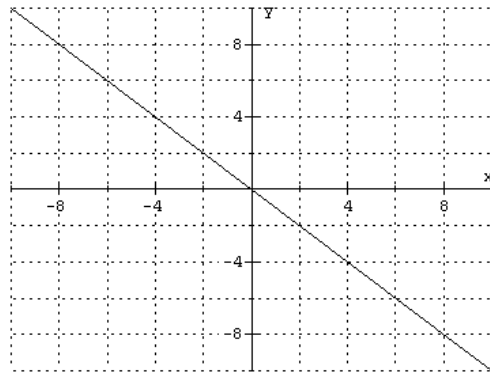
10. Table

x	y
-2	9
0	1
1	-3

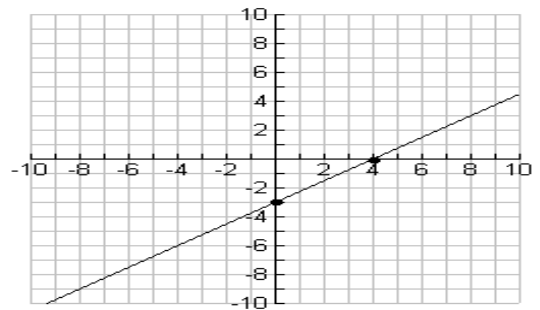
Graph



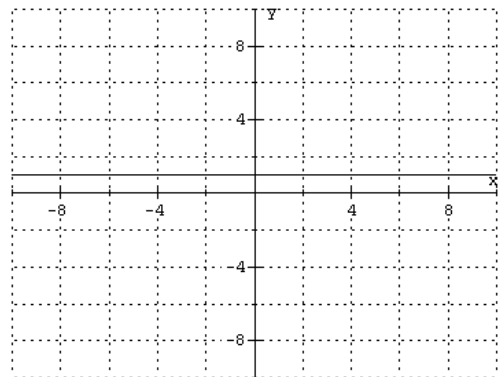
11.



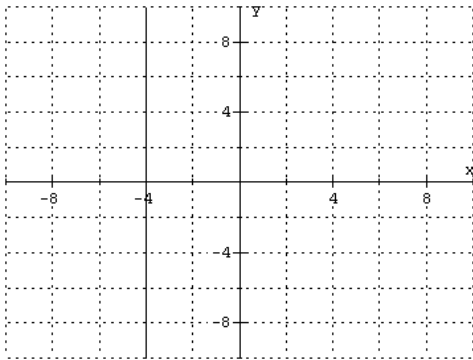
12.



13.



14



15. undefined

16. $\frac{-7}{5}$

17. 0

18. $\frac{5}{2}$

19. 2

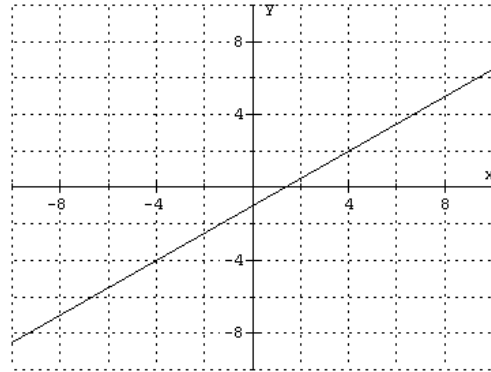
20. perpendicular

21. neither

22. parallel

23. $y = \frac{-1}{2}x + 7$

24.



25. $y = -5x + 4$

26. $y = \frac{3}{4}x + 3$