2. Use the intercepts to graphthe equation.

X + 3y = 6 then graph

3. Solve. Then graph

Y -5 > -14

The solution is {y|y>\_\_}

1. -11 -10 -9) -8 -7
2. -11 -10 (-9 -8 -7
3. -11 -10 [-9 -8 -7
4. -11 -10 -9] -8 -7

4. Multiply

-5/8 x (-5/8) =\_\_

5. Determine whether (7,-2) is a solution of 2x -6x = -5 yes\_\_\_ or no\_\_\_

6. Find the slope and then y-intercept

F (8) = -8x -2

The slope is \_\_

The y-intercept is (0,\_\_)

7. Media services charge $30 for a phone and $20/month for its economy plan. The equation c = 20t + 30 describes the total cost, c, of operating a media services phone for t months.

The total cost for 8 months of service is $\_\_\_ if a customer has only $80 available, how many months of service can receive?

1. 2 ½, B. 2 1/3, C. 3, D. 2

Graph the equation.

8. The length of a rectangle is fixed at 23cm. what widths will make perimeter greater than 72 cm?

The width must be greater than \_\_cm.

9. Amy [aid $92.91 for a pair of running shoes during a 15% off sale. What was the regular price?\_\_

10. Find the slope if it exists.

X=-2

M=\_\_\_\_

11. Find the indicated outputs for F(x) = 3xto the power of 2 -2x.

F(0)=\_\_\_\_

F(-1)=\_\_\_\_\_

F (2)=\_\_\_\_\_

12. Solve using the addition and multiplication principles.

5 + 5x < 45 the solution set is {x|x \_\_ \_\_}

13. Solve using the multiplication principles.

-6x > 1/13 the solution set is {x|x \_\_ \_\_}

14. trains A and B are traveling in the same direction on parallel tracks. Train A is traveling 40 mph and train B is traveling at 60 mph. Train A passes a station at 12:25 pm, if train B passes the same station at 12:40pm. At what time will train B catch up to train A?

When will train B catch up with train A? \_\_:\_\_ Am or Pm

15. Decide whether the pair of lines is parallel, perpendicular, or neither.

4x + 5y =4

4x + 5y =6

16. Determine if the graph is a function. No\_\_\_ YES\_\_\_

8

|  |  |
| --- | --- |
|  | 3 |
|  |  |

-8 8

-8

17. graph the inequality on a plane

2x + 3y ≤ 6

18. Solve

-0.6x < -18 The solution is {x|\_\_}

19. soybean meal is 16% protein, cornmeal is 8% protein. How many pounds of each should be mixed together in order to get 320LB mixture that is 9% protein?

How many pounds of the cornmeal should be in the mixture\_\_\_lb?

How many pounds of the soybean meal should be in the mixture\_\_\_\_lb?

20. The equation y= -1777x + 27,153 can be used to predict the number y of gun deaths inn the United States x years after 2000, that is, x=0 corresponds to 2000, x=2 corresponds to 2002, x=5 corresponds to 2005, and so on. Predict the number of gun deaths in 2005 and 2009. In what year will the number of gun deaths be 9383?

The predicted gun deaths in 2005 will be \_\_\_\_?

The predicted gun deaths in 2009 will be\_\_\_\_\_?

The predicted number of gun deaths will be 9383 in the year\_\_\_\_?

21. Solve the following system of equations.

X + 9x = 2 (1)

X = 8 – 9y (2)

What is the solution of the system? Select the correct choice below and if necessary, fill in the answer box to complete this choice.

1. The solution is\_\_\_\_
2. There is no solution

22. Solve the indicated letter.

b= 2c, for c The solution is c=\_\_\_\_\_

23. Use the intercepts to graph the equation

X + 4y = 8

24. translate to an algebraic expression.

The product of 43% and some number , to translate is \_\_\_\_?

25. Graph the line containing the given pair of points and find the slope. (6, 4), (-5, -3)

Find the slope of the line. M=\_\_\_\_

26. solve. Then graph. 3x ≥ 21

Choose the correct solution.

1. {x|x<7} B. {x|x≥ 7}

C {x|x≤ 7} D { x|x > 7}

Choose the correct graph of the solution

1. 5 6 ◦7 8 9
2. 5 6 7◦ 8 9
3. 5 6 ●7 8 9
4. 5 6 ●7 8 9

27. Evaluate

M + n

--------- for m=76 and n = 5

9

M + n

--------- = \_\_\_\_

9

28. Graph the equation and identify the y-intercept.

Y + x = -7 the y-intercept is \_\_\_\_?

29. Solve

5/4x + 1/8x = 9/8 + x The solution is x = \_\_\_\_\_

30. 70% of what number is 35?\_\_\_\_\_\_

31. Find the slope, if it exists, of the line containing the pair of points. (2,7) and (4,-3)

The slope m=\_\_\_\_\_

32. Collect like terms

16a + 7b - 14a – 9b =\_\_\_\_\_

33. Graph the system of inequalities.

Y ≥ -4

X ≥ 5

34. Solve the system of equations by graphing then classify the system as consistent oe inconsistent and as dependent or independent.

8x – 7y = -42

7y – 8x = 42

What is the solution of the system of equations?

1. No solution
2. Infinitely many solutions
3. A point

Is the system

○ Dependent

○ Independent

35. Find the coordinates of the point shown on the graph. What are the coordinates of the point?

5

|  |  |
| --- | --- |
| 4 3 2 1 |  |
|  |  |

-5 5  
 -5

36. Use the distributive property to help you solve the equation.

4(w-3)=-12

W = \_\_\_\_\_

37. Graph the equation y=4

38. Graph on a number line, where x is a real number

-4 < x ≤ 4

Choose the graph

1. -8 -6 ●-4 -2 0 2 4○ 6 8
2. -8 -6 -4● -2 0 2 ○4 6 8
3. -8 -6 ○-4 -2 0 2 4● 6 8
4. -8 -6 -4○ -2 0 2 ●4 6 8

( the circles are to be above the number 4’s)

39. Graph the equation using the slope and the y-intercept

Y = 6/5x + 5

40. on 3 consecutive passes, a football team gains 10 yards, loses 17 yards, and gains 25 yards. What number represents the total net yardage\_\_\_\_?

41. Solve using the multiplication principle. Don’t forget to perform a check

-5/6x = 19/10 The solution is\_\_\_\_?

42. Determine the slope of the line

6

|  |  |
| --- | --- |
|  | 3 |
| 3 |  |

-6 6  
 -6

43. Plot (0,3) on the coordinates axes

44. Solve by the elimination method

3x + 4y = 5

6x + 8y = 10

What is the solution of the system?

1. The solution is\_\_\_\_
2. There are infinitely many solution
3. There is no solution

45. Solve the compound inequality

4 > -5x + 3 or 7 ≤ -4x + 2

Choose the solution to the compound inequality

1. (-1/5, ∞ )
2. ( -∞, -5/4)
3. ( -∞, ∞ )
4. (-∞, -5/4] ᴜ ( -1/5, ∞)

46. The function H described by H(x) = 2.75x + 71.48 can be used to predict the height, in centimeters, of a woman whose humerus (the bone from the elbow to the shoulder) is x cm long.

Predict the height of a woman whose humerus is 33 cm long would be \_\_\_\_\_cm

47. in 1995, the life expectancy of males in a certain country was 69.1 yrs. In 2000, it was 72.0 yrs. Let E represent the life expectancy in year t and let t represent the number of yrs since 1995.

The linear function E (t) that fits the data is E(t)=\_\_t=\_\_. (round to the nearest tenth)

Use the function to predict the life expectancy of males in 2004 E(9)=\_\_\_\_(round to the nearest tenth)

48. Solve the elimination method

5r -4s = 41

4r – 5s = 41

What is the solution of the system?

1. The solution is\_\_\_\_?
2. There are infinitely many solutions.
3. There is no solution

49. Solve using the multiplication principle..

9x= -81 the solution is x = \_\_\_\_

50. Solve

0.8x + 3 ≤ 1.2x -4 the solution is\_\_\_\_\_

51. Simplify -9 [1-(-41-68)]=\_\_\_\_\_

52. Solve by the substitution method 2x + 5y =2

X = 6 -5y

What is the solution of the system?

1. The solution is \_\_\_\_\_
2. There is no solution

53. Find the domain of the function

G(x) = 4/4-9x

Choose the correct domain

1. {x|x is a real number and x ≠ 0}
2. {x|x is a real number and x ≠ 4}
3. {x|x is a real number and x ≥ 0}
4. {x|x is a real number and x ≠ 4/9}

54. Solve 8x –(5x + 7) = 8

The solution is\_\_\_\_?

55. find the domain of the function p(x) = x to the power of 2 – 2x + 4

What is the domain of p?

1. {x|x is a real number }
2. {x|x is a real number and x ≠ 4}
3. {x|x is a real number and x ≠ 0}
4. {x|x is a real number and x > 0}

56. Solve -24 ≤ 3x -7 ≤ -6 The solution is { x|\_\_\_≤ x ≤ \_\_\_}