

Name \_\_\_\_\_

**MATH 096 REVIEW Free Response  
CHAPTER 2**

**Simplify the expression.**

1.  $6z + 1 - 4z + 4$

1) \_\_\_\_\_

2.  $2.7x + 5.9 + 5.1x - 7.6$

2) \_\_\_\_\_

3.  $3(x - 3) - 4(2x - 3)$

3) \_\_\_\_\_

4.  $9 + 4(3y - 3)$

4) \_\_\_\_\_

**Solve the equation.**

5.  $-\frac{1}{3}x = -7$

5) \_\_\_\_\_

$$6. 5(2n - 2) = 9(n + 4)$$

6) \_\_\_\_\_

$$7. 9y - 7 + y = -(y + 8y)$$

7) \_\_\_\_\_

$$8. -9z + 5 + 7z = -3z + 10$$

8) \_\_\_\_\_

$$9. \frac{4(x - 4)}{5} = x - 7$$

9) \_\_\_\_\_

$$10. \frac{1}{3} - x + \frac{11}{3} = x - 6$$

10) \_\_\_\_\_

$$11. -0.3(x - 7) + x = 0.5(3 - x)$$

11) \_\_\_\_\_

12.  $-5(4x + 4) - 1 = -2(x + 1) + 3x$

12) \_\_\_\_\_

13.  $-3(x - 5) = x + 2 - 4x$

13) \_\_\_\_\_

**Solve.**

14. A number increased by two-thirds of the number is 35. Find the number.

14) \_\_\_\_\_

15. A gallon of stain covers 200 square feet. How many gallons are needed to paint two coats of stain on a deck that measures 20 feet by 50 feet?

15) \_\_\_\_\_

16. The Discovery Museum is building a second parking garage. The second parking garage will have double the capacity, in parking spaces, of their original parking garage. If the sum of these integers is 1806, find the capacity for both parking garages.

16) \_\_\_\_\_

17. Melissa invested an amount of money in a stock that earned an annual 3% return. She invested three times the original amount in another stock that earned an annual 5% return. If her total yearly return from both investments was \$5400, find out how much she invested at 3%? 17) \_\_\_\_\_

18. If two planes leave an airport at the same time with one flying west at 480 miles per hour and the other flying east at 630 miles per hour, how long will it take them to be 3330 miles apart? 18) \_\_\_\_\_

19. Find the value of  $x$  if  $y = 3$ ,  $m = -3$  and  $b = -3$  in the formula  $y = mx + b$ . 19) \_\_\_\_\_

**Solve the equation for the indicated variable.**

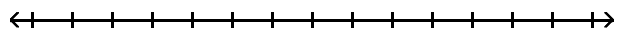
20.  $I = Prt$  for  $t$  20) \_\_\_\_\_

21.  $7x - 5y = 11$  for  $y$  21) \_\_\_\_\_

Solve and graph the inequality.

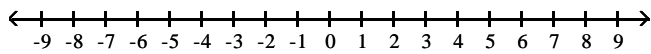
22.  $6x + 7 \geq 5x + 5$

22) \_\_\_\_\_



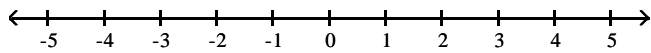
23.  $x - 2 > 3x + 2$

23) \_\_\_\_\_



24.  $-5 < 3x + 1 < 6$

24) \_\_\_\_\_



25.  $\frac{2(4x - 1)}{3} > 2$

25) \_\_\_\_\_

