

**MATH  
1010****SOLVING LINEAR EQUATIONS – QUIZ REVIEW**

Solve the equation. Check your solution.

1.  $y - 12 = 9$

2.  $0.6 = r + 4.2$

3.  $42 = 7x$

4.  $\frac{f}{5} = -4$

5.  $5p - 7 = 28$

6.  $22 - 6g = 18$

7.  $1.5x + 1.3x = -8.4$

8.  $5r + 8 = 2r$

9.  $\frac{4}{3}w - 12 = \frac{2}{3}w$

10.  $4(3q - 2) = 16q$

Solve the equation. Graph the solutions, if possible.

11.  $|2d - 5| = 3$

12.  $|3t + 9| = 6$

Solve the equation for  $y$ .

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

14.  $8 = 3x + 6y$

15.  $1.5x - 3y = 6$

16.  $\frac{1}{4}y - 2x = 5$

17. The formula for profit is  $P = R - C$ .a. Solve the formula for  $R$ .b. Use the new formula to find the value of  $R$  given that  $P = \$350$  and  $C = \$520$ .

Solve the equation for the bold variable.

18.  $V = \ell wh$

19.  $s = p - 0.2t$

20.  $Z = sL$

21.  $PV = nRT$

**Answers**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

**See left.**

12. \_\_\_\_\_

**See left.**

13. \_\_\_\_\_

14. \_\_\_\_\_

15. \_\_\_\_\_

16. \_\_\_\_\_

17. a. \_\_\_\_\_

b. \_\_\_\_\_

18. \_\_\_\_\_

19. \_\_\_\_\_

20. \_\_\_\_\_

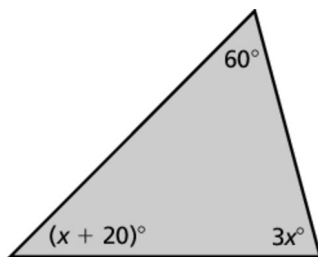
21. \_\_\_\_\_

**Answers**

- 22.** There are 24 more students in the seventh grade class than the number  $g$  in the eighth grade class. The seventh grade class has 160 students. Write and solve an equation to find the number of students in the eighth grade class.
- 23.** You rent a canoe for \$5 per hour. Your cost before the tax is added is \$12.50. Write and solve an equation to find the number of hours that you rented the canoe.
- 24.** The cost (in dollars) of making  $n$  birthday cakes is represented by  $C = 24n + 35$ . How many birthday cakes are made when the cost is \$395? Explain your reasoning.

- 22.** \_\_\_\_\_  
\_\_\_\_\_
- 23.** \_\_\_\_\_  
\_\_\_\_\_
- 24.** See left.
- 25.** \_\_\_\_\_

- 25.** The sum of the interior angle measures is  $180^\circ$ . Find the value of  $x$ .



Answers

1.  $y = 21$

2.  $r = -3.6$

3.  $x = 6$

4.  $f = -20$

5.  $p = 7$

6.  $g = \frac{2}{3}$

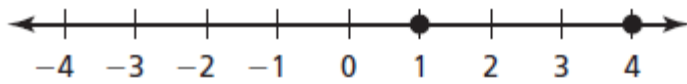
7.  $x = -3$

8.  $r = -\frac{8}{3}$

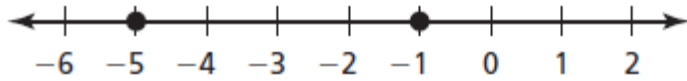
9.  $w = 18$

10.  $q = -2$

11.  $d = 4$  or  $d = 1$



12.  $t = -1$  or  $t = -5$



13.  $y = 3 - \frac{2}{5}x$

14.  $y = \frac{4}{3} - \frac{1}{2}x$

15.  $y = 0.5x - 2$

16.  $y = 8x + 20$

17. a.  $R = P + C$     b. \$870

18.  $h = \frac{V}{wl}$

19.  $p = s + 0.2t$

20.  $s = \frac{Z}{L}$

21.  $T = \frac{PV}{nR}$

22.  $160 = g + 24$ ;  $g = 136$ ; 136 students

23.  $5x = 12.50$ ;  $x = 2.5$ ; 2.5 h

24.  $395 = 24n + 35$ ;  $24n = 360$ ;  $n = 15$ ;  
15 birthday cakes

25.  $x = 25$