Name_____ Date _____

Solve the equation. Check your solution.

1. $x + 3 = 10$

2. $b - 6 = -14$

3. $5 = n + 9$

4. $y - 2.1 = 7.5$

5. $-6.4 = x + 4.3$

6. $k - \dfrac{1}{3} = \dfrac{5}{6}$

7. $10.5 + p = -8.32$

8. $3\dfrac{3}{4} = r + \dfrac{1}{8}$

9. $m + 1.06 = 5$

10. $-\dfrac{7}{12} = 1\dfrac{5}{6} + d$

11. $t - \dfrac{2}{7} = \dfrac{1}{2}$

12. $-10.2 + c = -8.14$

Write the word sentence as an equation. Then solve.

13. 5 more than a number y is -2.

14. The sum of 8 and a number h is 12.

15. -13 is 4 less than a number n.

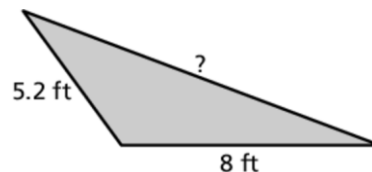**In Exercises 16–20, write an equation. Then solve.**

16. You earn $9 per hour babysitting. This is $2 more than what you earned per hour last year. What did you earn per hour last year?

17. Your mother asked you to turn the oven down to 325°F. This is 75°F less than it was. What was the original temperature?

18. The difference between the heights of your chair and your desk is $-10\dfrac{1}{4}$ inches. The height of your desk is $29\dfrac{3}{4}$ inches. What is the height of your chair?

19. Your Two-Day-Pass to a theme park is $76.50. This is $31.41 less than your uncle's Two-Day-Pass. What is the price of your uncle's pass?

20. The perimeter of a triangle is 25 feet. What is the length of the unknown side?

5.2 ft

?

8 ft

21. Find the value of $3x + 2$ when $7 + x = 5$.

3.3 Practice B

Solve the equation. Check your solution.

1. $x + 12 = 100$

2. $g - 16 = -52$

3. $-4.5 = m + 1.9$

4. $j - 12.1 = 7.53$

5. $y + 4.003 = -3.14$

6. $z - 4\dfrac{1}{3} = 2\dfrac{2}{3}$

7. $90.8 + q = -18.24$

8. $10\dfrac{2}{3} = r + 12\dfrac{1}{6}$

9. $b + 4.006 = 9$

10. $-7\dfrac{5}{8} = 1\dfrac{5}{6} + d$

11. $f - \dfrac{2}{15} = 6\dfrac{3}{5}$

12. $-10.216 + c = -12.014$

Write the word sentence as an equation. Then solve.

13. 27 is 12 more than a number x.

14. The difference of a number p and -9 is 12.

15. 35 less than a number m is -72.

In Exercises 16–18, write an equation. Then solve.

16. You swim the 50-meter freestyle in 28.12 seconds. This is 0.14 second less than your previous fastest time. What was your previous fastest time?

17. The perimeter of a rectangular backyard is $32\dfrac{1}{2}$ meters. The two shorter sides are each $7\dfrac{3}{8}$ meters long. What is the length of the two longer sides? (*Hint*: The sum of the shorter side and the longer side is equal to half of the perimeter.)

18. The temperature of dry ice is $-109.3°F$, which is $183.6°F$ less than the outside temperature. What is the outside temperature?

19. Your cell phone bill in August was $61.43, which was $21.75 more than your bill in July. Your cell phone bill in July was $13.62 less than your bill in June. What was your cell phone bill in June?

Find the values of x.

20. $|x| - 10.5 = 4.3$

21. $|x + 2| - 7 = 5$