Practice 2-6   Solving Equations by Multiplying or Dividing

Solve each equation.

1. $\frac{k}{-5} = -5$ _____

2. $-3 = \frac{n}{7}$ _____

3. $\frac{x}{12} = 0$ _____

4. $-6 = \frac{m}{-2}$ _____

5. $\frac{y}{-4} = -12$ _____

6. $\frac{s}{30} = 6$ _____

7. $\frac{1}{9}z = 0$ _____

8. $-\frac{m}{55} = 1$ _____

9. $-3x = 18$ _____

10. $-56 = 8y$ _____

11. $8p = -8$ _____

12. $-4s = -32$ _____

13. $14h = 42$ _____

14. $-175 = 25g$ _____

15. $-42 = 6m$ _____

16. $-2x = 34$ _____

17. $\frac{x}{-9} = -11$ _____

18. $216 = 9w$ _____

19. $-17v = -17$ _____

20. $-161 = 23t$ _____

21. $56h = 3{,}136$ _____

22. $20 = \frac{e}{-25}$ _____

23. $4{,}200 = 30x$ _____

24. $\frac{y}{-21} = -21$ _____

25. $\frac{m}{-3} = 21$ _____

26. $4{,}000 = \frac{x}{-40}$ _____

27. A bamboo tree grew 3 in. per day. Write and solve an equation to find how many days d it took the tree to grow 144 in.

   Equation: _____   Solution: _____

28. Carl drove 561 miles. His car averages 33 miles per gallon of gas. Write and solve an equation to find how much gas g Carl's car used.

   Equation: _____   Solution: _____

For what values of y is each equation true?

29. $-5|y| = -25$

30. $\frac{|y|}{2} = 28$

31. $9|y| = 27$

_____   _____   _____

2-6 • Guided Problem Solving

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GPS Student Page 94, Exercise 44

Buildings One of the world's tallest office buildings is in
Malaysia. The building has 88 stories. The height of the 88 stories
is 1,232 ft. What is the height of one story?

Read and Understand

1. How many stories does the building have? _____

2. How tall is the building? _____

3. What are you asked to find? _____

Plan and Solve

4. Choose a variable to represent the height of one story. _____

5. Use the sentence "The 1,232-ft height of
the building is equal to 88 stories times the
height of one story," and your variable for
the height of one story, to write an equation. _____

6. What should you do to get the
variable alone on one side of the equation? _____

7. Solve the equation for h. _____

8. What is the height of one story? _____

Look Back and Check

9. Multiply the height of one story by the number of stories. _____
The result should be equal to the height of the building.

Solve Another Problem

10. You have 34 sections of fencing, all of
equal length. You put them together to
build a fence 136 ft long. Write an equation
and solve to find the length of one section. _____