Name _

3.5

Practice A

For use with pages 160–165

Yearbook Layout In Exercises 1–3, use the following information.

A page of a school yearbook is $8\frac{1}{2}$ inches by 11 inches. The left and right margins are 1 inch and $2\frac{1}{2}$ inches, respectively. The space between pictures is $\frac{1}{4}$ inch. How wide can each picture be to fit 3 across the width of the page?

- **1.** Write a verbal model for this problem.
- **2.** Write an equation for the model.
- **3.** Solve the equation and answer the question.



Saving and Spending In Exercises 7–10, use the following information.

Currently, you have \$60 and your sister has \$135. You decide to save \$5 of your allowance each week, while your sister decides to spend her whole allowance plus \$10 each week. How long will it be before you have as much money as your sister?

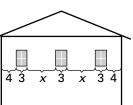
- 7. Write a verbal model for this problem.
- 8. Write an equation for the model.
- **9.** Solve the equation and answer the question.
- **10.** Copy and complete the table below using the information from the original problem statement.

Week	0	1	2	3	4	5
Your money						
Sister's money						

House Design In Exercises 4–6, use the following information.

You are designing a house with three 3-feet-wide windows on the back of the house. There are 4 feet between each end window and an edge of the house. The width of the house is 33 feet. How far apart should the windows be?

- **4**. Write a verbal model for this problem.
- **5.** Write an equation for the model.
- **6.** Solve the equation and answer the question.



Temperature Change In Exercises 11–14, use the following information.

In Detroit the temperature is 69° F and is rising at a rate of 2° F per hour. In Atlanta the temperature is 84° F and is falling at a rate of 3° F per hour. If the temperatures continue to change at the same rates, how long will it be before the temperatures are the same?

- **11.** Write a verbal model for this problem.
- **12.** Write an equation for the model.
- **13.** Solve the equation and answer the question.
- **14.** Copy and complete the table below using the information from the original problem statement.

Hour	0	1	2	3	4	5
Detroit temperature						
Atlanta temperature						