

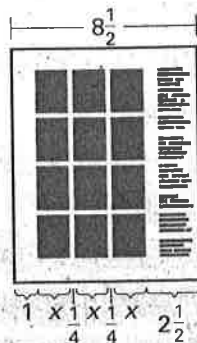
# Practice A

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?

- Write a verbal model for this problem.
- Write an equation for the model.
- 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?

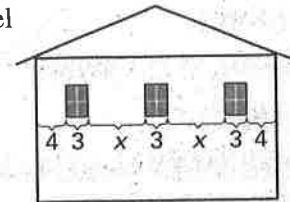
- Write a verbal model for this problem.
- Write an equation for the model.
- Solve the equation and answer the question.
- Copy and complete the table below using the information from the original problem statement.

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-foot-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?

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



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

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

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

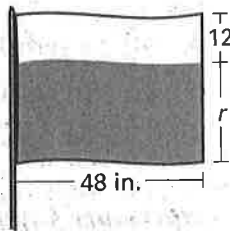
**Practice B**

For use with pages 160–165

**Sewing Flags** In Exercises 1–3, use the following information.

You are making flags for the school color guard. Each flag has a red stripe and a 12-inch-wide white stripe. The width of each flag is  $\frac{3}{4}$  its length. The length is 48 inches. How wide is the red stripe?

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



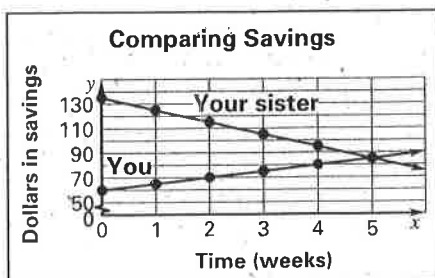
**Saving and Spending** In Exercises 7–11, use the following information.

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?

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

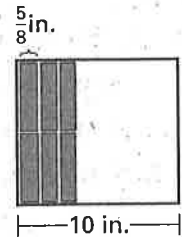
- Use the graph to check the answer. Is the solution correct? Explain.



**Cassette Storage** In Exercises 4–6, use the following information.

You have a box that is a good size for your tape collection. Two rows of tapes will fit in the box. The box is 10 inches wide. Each tape is  $\frac{5}{8}$  inches wide. How many tapes will fit in the box?

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



**Temperature Change** In Exercises 12–16, 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?

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

- Use the graph to check the answer. Is the solution correct? Explain.

