

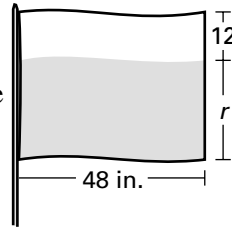
Practice B

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.



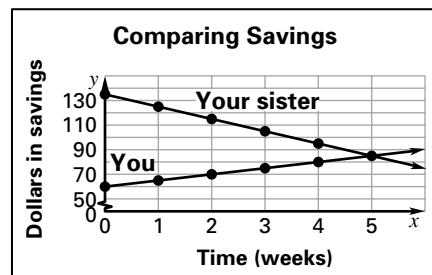
Saving and Spending In Exercises 7–11, use the following information.

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 | | | | | | |

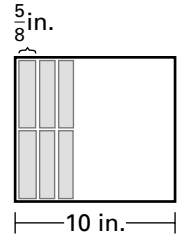
- Use the graph to check the answer. Is the solution correct? Explain.



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.

