

GUIDED NOTES – 2.3 MODELS AND APPLICATIONS

LEARNING OBJECTIVES

In this section, you will:

- Set up a linear equation to solve a real-world application.
- Use a formula to solve a real-world application.

SETTING UP A LINEAR EQUATION TO SOLVE A REAL-WORLD APPLICATION

- Write out the 5 step procedure for modeling a linear equation to fit a given real-world problem, as described in this textbook section.

1.

2.

3.

4.

5.

USING A FORMULA TO SOLVE A REAL-WORLD APPLICATION

- Many applications are solved using known formulas. Examples of formulas include the area of a rectangle, the perimeter of a rectangle, and the volume of a rectangular solid. Write out the formulas for the 3 examples.

1. Area of a Rectangle: _____

2. Perimeter of a Rectangle: _____

3. Volume of a Rectangular Solid: _____

Try It: Read Example 4 in the text, then answer the following.

Find the dimensions of a rectangle given that the perimeter is 110 cm and the length is 1 cm more than twice the width.

Try It: Read Example 5 in the text, then answer the following.

A game room has a perimeter of 70 ft. The length is five more than twice the width. How many ft² of new carpeting should be ordered?

Homework: You should now be ready to attempt problems 4-5 in “Homework – Section 2.3” on WeBWorK.