

## Basic Algebra 1.5

Use a four-step plan to solve problems

formula

commutative property

associative property

identity

zero product property

Substitution

distributive property

What are some problem solving strategies?

## **Problem-Solving Strategies**

**Look for a pattern.**

**Draw a diagram.**

**Make a table.**

**Work backward.**

**Use an equation or  
formula.**

**Make a graph.**

**Guess and check.**

1. Explore

2. Plan

3. Solve

4. Examine

## Hands-On Algebra

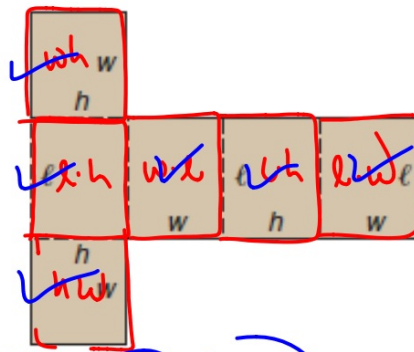
$$A = l \cdot w$$

**Materials:**  rectangular box

 ruler

**Step 1** Label the edges of a rectangular box  $\ell$ ,  $w$ , or  $h$  to represent the length, width, and height of the box.

**Step 2** Take the box apart so that it lies flat on the table with the labels face up.



$$(wh) + (lh) + (hw) + (wl) + (lh) + (lw)$$

$$2lh + 2wh + 2lw$$

**2** How many ways can you make 25¢ using dimes, nickels, and pennies?

(go to pdf, which one ~~did me miss?~~)



**Getting Ready**

For each situation, answer the related questions.

Phoebe and Hai picked fourteen pints of raspberries in three hours. Hai picked five more pints than Phoebe.

**Samples:**

How many pints were picked in all?

How long did Phoebe and Hai work?

Who picked more pints?

If Phoebe picked  $x$  pints, how many did Hai pick?

**Solutions:**

14

3 hours

Hai

$x + 5$

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