

# Problem-Solving Application:

## Use a Formula

Use the questions to help you solve.

- Mr. Davis sells pyramid candles at craft fairs. The length of one side of the base is 3 inches, and the perpendicular height is 7 inches. One block of wax measures  $10 \times 10 \times 2$  inches. How many candles can he make from that block?

**UNDERSTAND**

Does this problem involve area, volume, or both?

\_\_\_\_\_

What formula(s) will you need to use?

\_\_\_\_\_  
\_\_\_\_\_

**PLAN**

What do you need to do?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SOLVE**

What numbers will you substitute into the formula(s)?

\_\_\_\_\_

How many candles can Mr. Davis make?

\_\_\_\_\_

**LOOK BACK**

Did you answer the question that was asked?

\_\_\_\_\_

- Mr. Davis packages his candles in cardboard boxes. The base and height of a box are  $\frac{1}{2}$  inch greater than the dimensions of the candle. Mr. Davis wants to paint the interior and the exterior except for the bottom. How much area will he paint on each box?

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