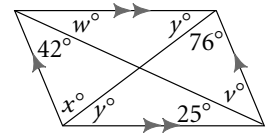


## 3-1 • Guided Problem Solving

### **GPS** Student Page 132, Exercise 24

**Algebra** Find the values of the variables.

#### **Read and Understand**



- Which line segments are parallel?

\_\_\_\_\_

- Which line segments are transversals? \_\_\_\_\_

- What types of angles are formed by parallel lines and transversals? \_\_\_\_\_

#### **Plan and Solve**

- Which angle measures can be found directly using known angles and Theorem 3-1, the Alternate Interior Angles Theorem? \_\_\_\_\_  
Give those angle measures.

\_\_\_\_\_

- Find the remaining angle measure(s) using Theorem 3-2, the Same-Side Interior Angles Theorem. \_\_\_\_\_

#### **Look Back and Check**

- Do your answers seem reasonable? For instance, list the measures of the angles you found from smallest to largest. \_\_\_\_\_  
Are these in the same order as the corresponding angles in the illustration?

\_\_\_\_\_

#### **Solve Another Problem**

- Suppose that the 25 in the figure is instead 35, and the 76 is instead 57. Again find the values of the variables.

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