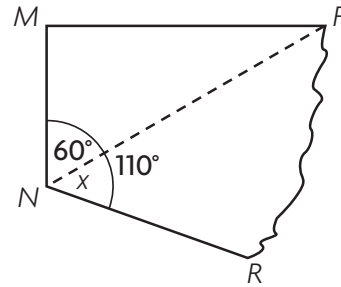


# Unknown Angle Measures

Use the strategy *draw a diagram*.

Mrs. Allen is cutting a piece of wood for a set for the school play. She needs a piece of wood with a  $60^\circ$  angle. After the cut, what is the angle measure of the part left over?



## Read the Problem

What do I need to find?

I need to find the angle  
measure of the part left  
over, or  $m\angle PNR$ .

What information do I need to use?

I can use the angle  
measures I know:  
 $m\angle MNP = 60^\circ$  and  
 $m\angle MNR = 110^\circ$ .

How will I use the information?

I can draw a bar model to  
find the unknown angle  
measure, or  $m\angle PNR$ .

## Solve the Problem

I can draw a bar model to represent the problem.

Then I can write an equation to solve the problem.

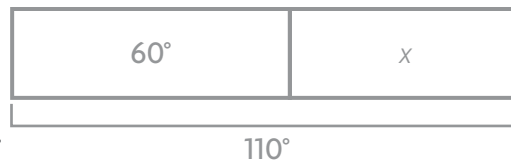
$$m\angle MNP + m\angle PNR = m\angle MNR$$

$$\underline{60^\circ} + x = \underline{110^\circ}$$

$$x = \underline{110^\circ} - \underline{60^\circ}, \text{ or } \underline{50^\circ}$$

$$\text{So, } m\angle PNR = \underline{50^\circ}$$

The angle measure of the part left over is  $50^\circ$ .



- 1** Cal is cutting a rectangular board as shown. What is the angle measure of the part left over? \_\_\_\_\_

- 2** What equation did you use to solve?  
\_\_\_\_\_

