

# Join and Separate Angles

The measure of an angle equals the sum of the measures of its parts.

Use your protractor and the angles at the right.

**Step 1** Measure  $\angle ABC$  and  $\angle CBD$ . Record the measures.

$$m\angle ABC = \underline{35^\circ}; m\angle CBD = \underline{40^\circ}$$

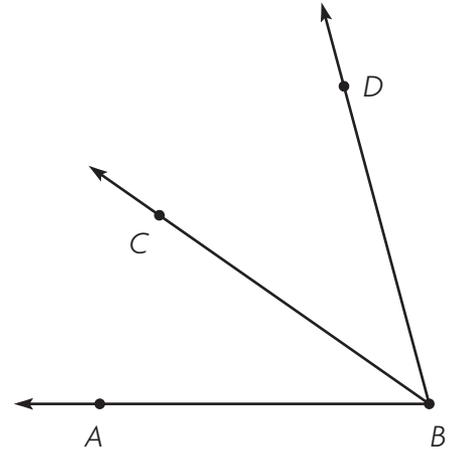
**Step 2** Find the sum of the measures.

$$\underline{35^\circ} + \underline{40^\circ} = \underline{75^\circ}$$

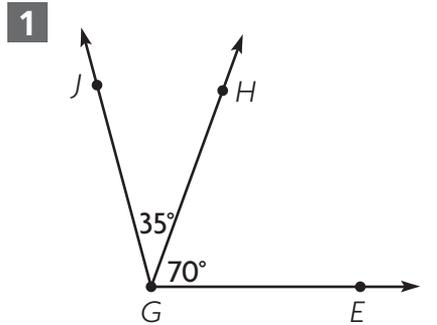
**Step 3** Measure  $\angle ABD$ . Record the measure.

$$m\angle ABD = \underline{75^\circ}$$

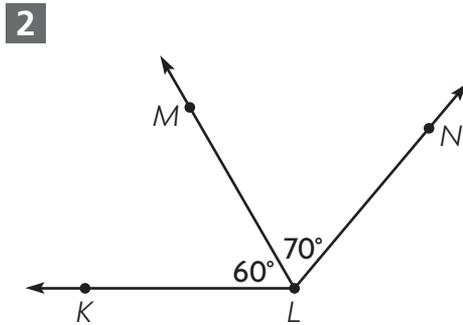
So,  $m\angle ABC + m\angle CBD = m\angle ABD$ .



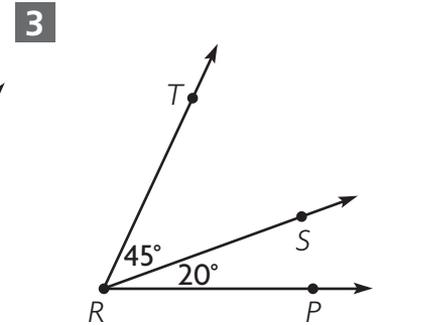
Add to find the measure of the angle. Write an equation to record your work.



$$m\angle EGJ = \underline{\hspace{2cm}}$$



$$m\angle KLN = \underline{\hspace{2cm}}$$

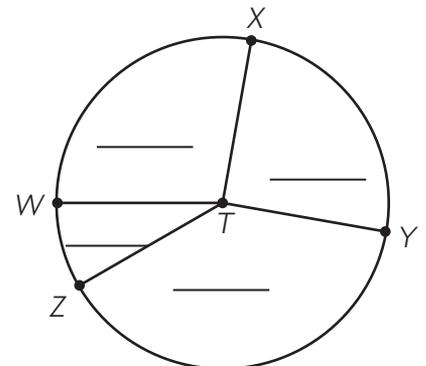


$$m\angle PRT = \underline{\hspace{2cm}}$$

Use a protractor and the art at the right.

**4** Find the measure of each angle. Label each angle with its measure.

**5** Write the sum of the angle measures as an equation.



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