### 2.2 Angle Bisectors

Objective: Identify and name angle bisectors. Find angle measures.

An angle bisector is a ray that divides an angle into two angles that are congruent.

$\overrightarrow{\mathrm{BC}}$ bisects $\angle \mathrm{ABD}$.
$\angle A B C \cong \angle C B D$

Example 1: Checkpoint on the bottom of pg. 61.

$$
\begin{array}{ll}
\text { 1. } \frac{52}{2}=26 & \text { 2. } \frac{90}{2}=45 \\
\angle G H K=26^{\circ} & \angle G H K=45^{\circ} \\
\angle K H J=26^{\circ} & \angle K H J=45^{\circ}
\end{array}
$$

Example 2: Checkpoint in the middle of pg. 62.
4.

$$
\begin{aligned}
& \angle S Q P=29^{\circ} \\
& \angle P Q R=29+29=58^{\circ}
\end{aligned}
$$

acute
5.

$$
\begin{aligned}
\angle S Q P=45^{\circ} \\
\angle P Q R=45+45=90^{\circ} \\
\text { right }
\end{aligned}
$$

Example 3: Checkpoint on the top of pg. 63.

$$
\text { 7. } \begin{aligned}
\angle J K M & =\frac{96}{2}=48^{\circ} \\
\angle M K L & =48^{\circ} \\
\text { 8. } \angle W U V & =60^{\circ} \\
\angle W U T & =60+60=120^{\circ}
\end{aligned}
$$

Example 4: Checkpoint on the bottom of pg. 63.

$$
\begin{array}{rlr}
\text { 9. } \begin{array}{rlr}
55 & =x+12 & \text { 10. } \\
-12 & 9 x & =8 x+3 \\
43 & =x & -8 x-8 x \\
& x & =3
\end{array}
\end{array}
$$

$$
\begin{aligned}
& \text { Name } \\
& \begin{array}{l}
2.2 \\
\text { pg. } 64-66 \\
\\
\\
\\
\\
\\
\\
\\
\\
\\
17-17-30 \\
33
\end{array}
\end{aligned}
$$

Notes 2.3

