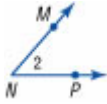


Lesson 10-1

Example 1 Naming Angles

Name the angle at the right.



- Use the vertex as the middle letter and a point from each side.
 $\angle MNP$ or $\angle PNM$
- Use the vertex only.
 $\angle N$
- Use a number.
 $\angle 2$

The angle can be named in four ways: $\angle MNP$, $\angle PNM$, $\angle N$, $\angle 2$.

Example 2 Classify Angles

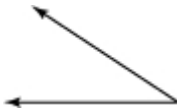
Classify the angle as *acute*, *obtuse*, *right*, or *straight*.



The angle is greater than 90° and less than 180° , so it is an obtuse angle.

Example 3 Classify Angles

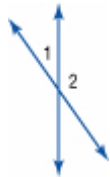
Classify the angle as *acute*, *obtuse*, *right*, or *straight*.



The angle is less than 90° , so it is an acute angle.

Example 4 Classify Angles

Classify each pair of angles as *complimentary*, *supplementary*, or *neither*.



$\angle 1$ and $\angle 2$ form a straight line. So, the angles are supplementary.

Example 5 Classify Angles

Classify each pair of angles as *complimentary*, *supplementary*, or *neither*.

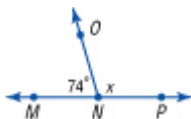


$$38^\circ + 52^\circ = 90^\circ$$

The angles are complimentary.

Example 6 Find a Missing Angle Measure

ALGEBRA Find the value of x .



Since the two angles form a straight line, they are supplementary.

Words The sum of the measures of $\angle MNO$ and $\angle ONP$ is 180° .

Variable Let x represent the measure of $\angle ONP$.

Equation $74 + x = 180$

$$\begin{array}{r} 74 + x = 180 \\ - 74 \quad \quad - 74 \\ \hline x = 106 \end{array}$$

Write the equation.

Subtract 74 from each side.

So, the value of x is 106.