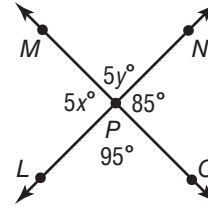


Lesson 1 Homework Practice

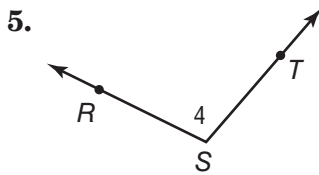
Classify Angles

Use the figure at the right to answer Exercises 1–4.

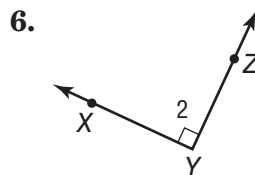
- Name two angles that are vertical.
 $\angle MPL$, $\angle NPO$ or $\angle MPN$, $\angle LPO$
- Name two angles that are adjacent.
 $\angle LPM$, $\angle MPN$ or $\angle MPN$, $\angle NPO$
 $\angle NPO$, $\angle OPL$ or $\angle OPL$, $\angle LPM$
- Find the value of x . **17**
- Find the value of y . **19**



Name each angle in four ways. Then classify the angle as *acute*, *right*, *obtuse*, or *straight*.



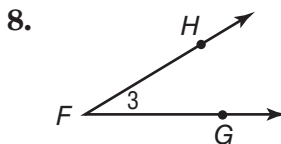
$\angle 4$, $\angle S$, $\angle RST$,
 $\angle TSR$; obtuse



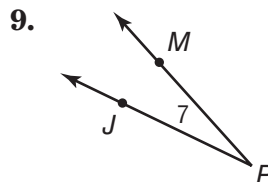
$\angle 2$, $\angle Y$, $\angle XYZ$,
 $\angle ZYX$; right



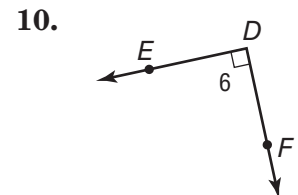
$\angle 1$, $\angle B$, $\angle CBA$,
 $\angle ABC$; straight



$\angle 3$, $\angle F$, $\angle HFG$,
 $\angle GFH$; acute



$\angle 7$, $\angle P$, $\angle JPM$,
 $\angle MPJ$; acute

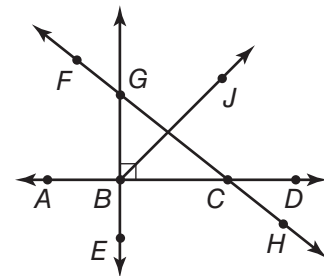


$\angle 6$, $\angle D$, $\angle EDF$,
 $\angle FDE$; right

Use the figure at the right to name the following.

11–14 Sample answers are given.

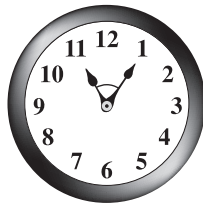
- two acute angles
 $\angle DCH$, $\angle JBD$
- two straight angles
 $\angle ABD$, $\angle EBG$
- two right angles
 $\angle ABE$, $\angle GBC$
- two obtuse angles
 $\angle FGE$, $\angle ACH$



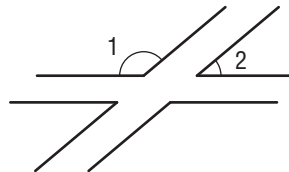
Lesson 1 Problem-Solving Practice

Classify Angles

1. CLOCKS The time shown on the clock is 11:05. Starting at this time, approximately what time will it be when the hands form an obtuse angle?
Sample answer: about 11:12



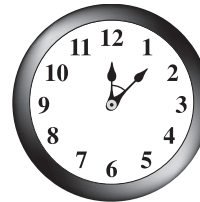
2. AIRPORT The runways at a local airport are sketched in the figure. Classify $\angle 1$ and $\angle 2$ as *acute*, *obtuse*, *right*, or *straight*. **$\angle 1$ is obtuse; $\angle 2$ is acute.**



3. ALPHABET Which of the following letters contain at least one acute angle? Which contain vertical angles? Which contain adjacent angles?
A, X; X; A, E, X

A E L X

4. CLOCKS The time shown on the clock is 12:07. After 20 minutes have passed, will the angle formed by the hour and minute hands be *acute*, *obtuse*, *right*, or *straight*? **obtuse**



5. BALLET When a ballet dancer's feet are in first position, the heels are touching, and the feet are turned out. A dancer with excellent technique can position his or her feet so that they are nearly in a straight line. Isabella is practicing her technique. Classify the angle her feet form as *acute*, *obtuse*, or *right*.
obtuse



6. ARCHITECTURE The plans for a new aquarium call for 2 hallways of exhibits leading out of a circular main room as shown. What is the value of x ? **23**

