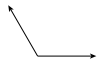
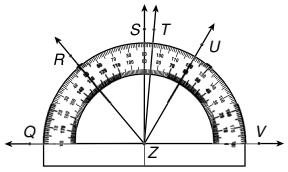
LESSON 8-2

Practice A

Classifying Angles

Tell whether each angle is acute, right, obtuse, or straight.

1.  acute
2.  obtuse
3.  right



Use the diagram to complete Exercises 4-8.

4. Add the measures of $\angle UZV$ and $\angle TZU$. — 60° + 25° = 85°
5. Are $\angle UZV$ and $\angle TZU$ complementary, supplementary, or neither? — neither
6. Add the measures of $\angle QZR$ and $\angle RZS$. — 50° + 40° = 90°
7. Are $\angle QZR$ and $\angle RZS$ complementary, supplementary, or neither? — complementary
8. Are $\angle QZS$ and $\angle VZS$ complementary, supplementary, or neither? — supplementary
9. Angles G and H are supplementary. If $m\angle G$ is 80°, what is $m\angle H$? — 100°
10. Angles M and N are complementary. If $m\angle M$ is 20°, what is $m\angle N$? — 70°

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LESSON 8-2

Practice B

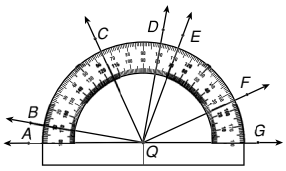
Classifying Angles

Tell whether each angle is acute, right, obtuse, or straight.

1.  straight
2.  acute
3.  obtuse

Use the diagram to tell whether the angles are complementary, supplementary or neither.

4. $\angle AQC$ and $\angle GQC$ — supplementary
5. $\angle BQD$ and $\angle DQE$ — neither
6. $\angle CQE$ and $\angle EQF$ — complementary
7. $\angle GQF$ and $\angle FQE$ — neither
8. $\angle BQC$ and $\angle DQC$ — complementary



9. Angles W and X are supplementary. If $m\angle W$ is 37°, what is $m\angle X$? — 143°
10. Angles S and T are complementary. If $m\angle S$ is 64°, what is $m\angle T$? — 26°
11. Angles C and D are supplementary. If $m\angle C$ is 83°, what is $m\angle D$? — 97°
12. Angles U and V are complementary. If $m\angle U$ is 41°, what is $m\angle V$? — 49°

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LESSON 8-2

Practice C

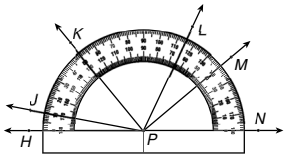
Classifying Angles

Tell whether each angle is acute, right, obtuse, or straight.

1.  right
2. obtuse
3.  acute

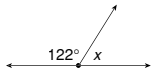
Use the diagram to tell whether the angles are complementary, supplementary or neither.

4. $\angle JPK$ and $\angle KPL$ — neither
5. $\angle LPK$ and $\angle MPL$ — complementary
6. $\angle HPM$ and $\angle MPN$ — supplementary
7. $\angle LPM$ and $\angle KPJ$ — neither



8. Angles L and M are complementary. If $m\angle L$ is 16°, what is $m\angle M$? — 74°
9. Angles R and S are supplementary. If $m\angle R$ is 78°, what is $m\angle S$? — 102°

Classify each pair of angles as complementary or supplementary. Then find the missing angle measure.

10.  supplementary; 58°
11.  complementary; 55°

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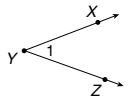
LESSON 8-2

Reteach

Classifying Angles

Two rays with a common endpoint form an **angle.** The common endpoint is called the **vertex.** You can name an angle three ways:

- with the letter at the vertex: $\angle Y$.
- with a number written inside the angle: $\angle 1$.
- with three letters: $\angle XYZ$ or $\angle ZYX$. The letter of the vertex must be in the middle.



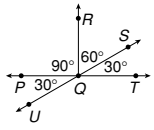
Angles are measured in degrees and classified by their measures.



Right angle: 90°	Acute angle: between 0° and 90°	Obtuse angle: between 90° and 180°	Straight angle: 180°

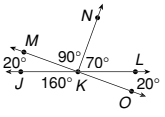
Two angles are **complementary** if their sum is 90°.
Two angles are **supplementary** if their sum is 180°.

Use the figure to complete the statements.



1. $\angle PQR$ measures 90°. It is a right angle.
2. $\angle RQS$ measures 60°. It is an acute angle.
3. $\angle UQR$ measures 30° + 90°, or 120°. It is an obtuse angle.
4. $\angle PQT$ measures 90° + 60° + 30°, or 180°. It is a straight angle.

Use the figure to complete the statements.



5. $\angle NKL$ and $\angle LKO$ are complementary angles since 70° + 20° = 90°.
6. $\angle JKO$ and $\angle OKL$ are supplementary angles since 160° + 20° = 180°.

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