

**CYU 1.6 Describing Pairs of Angles**

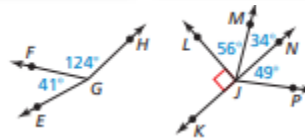
*Use when you get it right all by yourself*  
*S* *Use when you did it all by yourself, but made a silly mistake*  
*H* *Use when you could do it alone with a little help from teacher or peer*  
*G* *Use when you completed the problem in a group*  
*X* *Use when a question was attempted but wrong (get help)*  
*N* *Use when a question was not even attempted*

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Adjacent & nonadjacent angles	1, 4	2, 5	12
Complementary & Supplementary angles	3, 11f	2, 5, 7, 9	6, 8, 10
Linear Pair	4	1	12
Review from previous sections	11	11	11

1. Which one of the following does *not* belong with the other three?

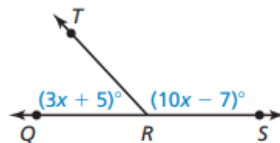


2. Name a pair of nonadjacent supplementary angles.

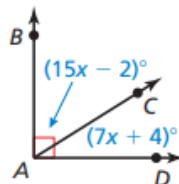


3.  $\angle 1$  is a complement of  $\angle 2$ , and  $m\angle 1 = 23^\circ$ . Find  $m\angle 2$ .

4. Find the measure of each angle.



5. Find the measure of each angle.



6.  $\angle EFG$  and  $\angle LMN$  are supplementary angles,  $m\angle EFG = (3x + 17)^\circ$ , and  $m\angle LMN = \left(\frac{1}{2}x - 5\right)^\circ$ . Find the measure of each angle.

7. The measure of an angle is nine times the measure of its complement. Find the angle and its complement's measure.
8. The measure of an angle is one-fourth the measure of its complement. Find the angle and its complement's measure.
9. Write and solve an algebraic equation to find the measure of each angle based on the given description. **The measure of one angle is  $3^\circ$  more than half the measure of its supplement.**
10. **Sometimes, Always, or Never:** If two complementary angles are congruent, then the measure of each angle is  $45^\circ$ .

11. State whether you can conclude that each statement is true based on the figure. EXPLAIN your reasoning.

a.  $\overline{CA} \cong \overline{AF}$ .

b. *Points C, A, and F are collinear.*

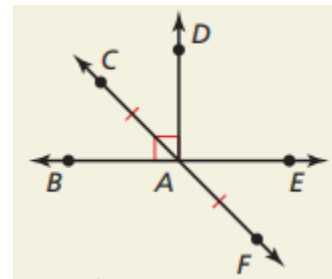
c.  $\angle CAD \cong \angle EAF$ .

d.  $\overline{BA} \cong \overline{AE}$ .

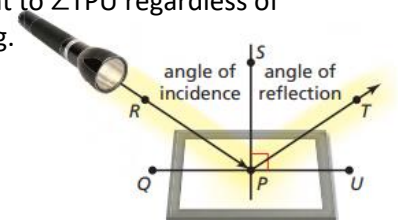
e.  $\overline{CF}$ ,  $\overline{BE}$ , &  $\overline{AD}$  intersect at point A.

f.  $\angle BAC$  &  $\angle CAD$  are complementary angles.

g.  $\angle DAE$  is a right angle.



12. Light from a flashlight strikes a mirror and is reflected so that the angle of reflection is congruent to the angle of incidence. Your classmate claims that  $\angle QPR$  is congruent to  $\angle TPU$  regardless of the measure of  $\angle RPS$ . Is your classmate correct? Explain your reasoning.



**CYU Reflection:** How far can you go: basic, intermediate, or advanced?

**Rate your mastery level!**

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

1     2     3     4     5     6     7     8

1	2	3	4	5	6	7	8
Basic		Intermediate			Advanced		Solved ALL!

