



PRACTICE



TUTORIAL

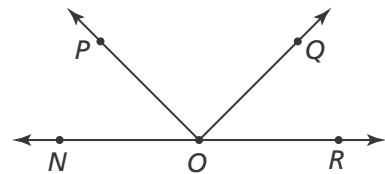
Name: \_\_\_\_\_

## 8-4 Additional Practice

Scan for  
Multimedia

1. a. Name a pair of adjacent angles in this figure.

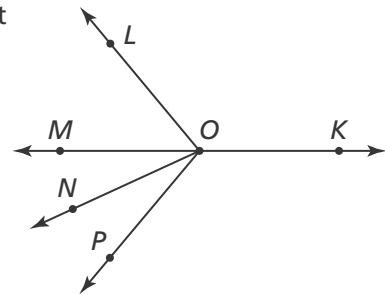
b. What common point is shared by all adjacent angles in this figure?



2. Dexter needs to find each angle in this figure that is adjacent to  $\angle LON$ . He claims that  $\angle MON$  is adjacent to  $\angle LON$ .

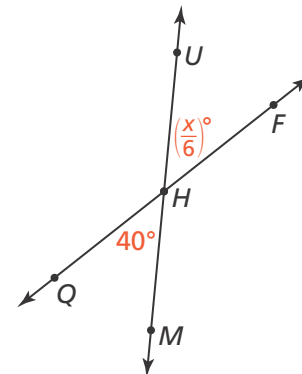
a. List each angle that is adjacent to  $\angle LON$ .

b. Why is Dexter's claim incorrect?



3. a. Use vertical angles to find the value of  $x$ .

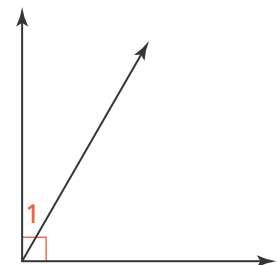
b. Explain how to find the value of  $x$  without using vertical angles.



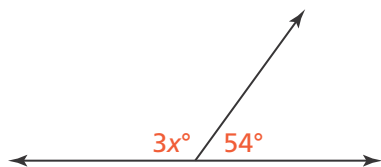
(The figure is not shown to scale.)

4. Find the measure of the complement to an  $18^\circ$  angle.  
Explain your answer.

5. The measure of  $\angle 1$  is  $39^\circ$ . What is the measure of the angle adjacent to  $\angle 1$ ? Explain.

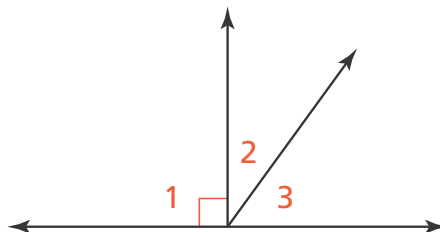


6. The adjacent angles shown below are supplementary. Find the value of  $x$ .



7. Find the supplementary angle to an angle that is  $128.9^\circ$ . Explain your answer.

8. **Higher Order Thinking** In the diagram,  $m\angle 1 = (125 - y)^\circ$ ,  $m\angle 2 = 24^\circ$ , and  $m\angle 3 = (x + 46)^\circ$ . Solve for  $x$  and  $y$  and find  $m\angle 1$  and  $m\angle 3$ . Explain how you found the measure of each angle and the value of each variable.



## © Assessment Practice

9. Cooper incorrectly claims  $m\angle b = 125^\circ$  in the diagram shown at the right.

### PART A

Find  $m\angle b$ . Explain your answer.

### PART B

What mistake did Cooper likely make?

