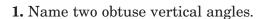
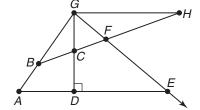
## 1-5 Practice

## Angle Relationships

For Exercises 1–4, use the figure at the right and a protractor.



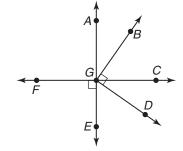
**2.** Name a linear pair whose vertex is *B*.



- **3.** Name an angle not adjacent to but complementary to  $\angle FGC$ .
- **4.** Name an angle adjacent and supplementary to  $\angle DCB$ .
- **5.** Two angles are complementary. The measure of one angle is 21 more than twice the measure of the other angle. Find the measures of the angles.
- **6.** If a supplement of an angle has a measure 78 less than the measure of the angle, what are the measures of the angles?

ALGEBRA For Exercises 7–8, use the figure at the right.

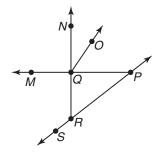
7. If 
$$m \angle FGE = 5x + 10$$
, find x so that  $\overrightarrow{FC} \perp \overrightarrow{AE}$ .



**8.** If  $m \angle BGC = 16x - 4$  and  $m \angle CGD = 2x + 13$ , find x so that  $\angle BGD$  is a right angle.

Determine whether each statement can be assumed from the figure. Explain.

**9.**  $\angle NQO$  and  $\angle OQP$  are complementary.



- **10.**  $\angle SRQ$  and  $\angle QRP$  is a linear pair.
- **11.**  $\angle MQN$  and  $\angle MQR$  are vertical angles.
- **12. STREET MAPS** Darren sketched a map of the cross streets nearest to his home for his friend Miguel. Describe two different angle relationships between the streets.

