## 1-5   Practice

Angle Relationships

Name an angle or angle pair that satisfies each condition.

1. Name two obtuse vertical angles.

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. ALGEBRA 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. ALGEBRA If a supplement of an angle has a measure 78 less than the measure of the angle, what are the measures of the angles?
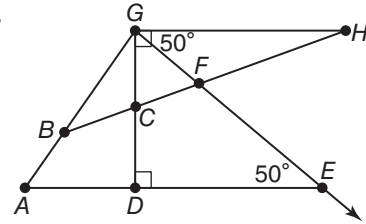
ALGEBRA For Exercises 7–8, use the figure at the right.

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

8. If $m\angle BGC = 16x - 4$ and $m\angle CGD = 2x + 13$, find the value of x so that $\angle BGD$ is a right angle.
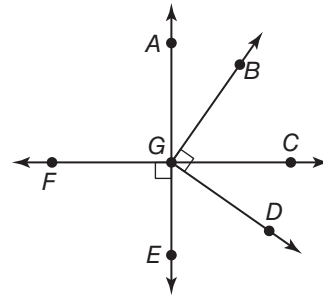
Determine whether each statement can be assumed from the figure. Explain.

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.