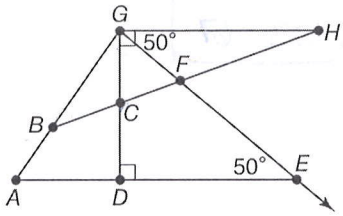
NAME Key DATE _____ PERIOD _____

1-5 Practice

Angle Relationships

Name an angle or angle pair that satisfies each condition.



1. Name two obtuse vertical angles. ∠BGA, ∠HFG

2. Name a linear pair whose vertex is B. ∠ABC, ∠GBC

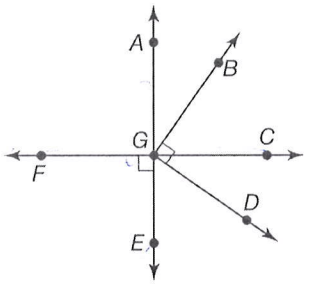
3. Name an angle not adjacent to, but complementary to $\angle FGC$. ∠FED

4. Name an angle adjacent and supplementary to $\angle DCB$. ∠DCF

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. 73, 67

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? 129, 51

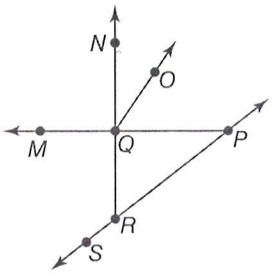
ALGEBRA For Exercises 7–8, use the figure at the right.



7. If $m\angle FGE = 5x + 10$, find the value of x so that $\overleftrightarrow{FC} \perp \overleftrightarrow{AE}$. 16

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. 4.5

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

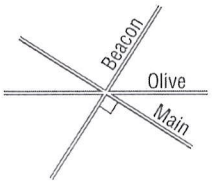


9. $\angle NQO$ and $\angle OQP$ are complementary. NO, ∠NQP is not 90

10. $\angle SRQ$ and $\angle QRP$ is a linear pair. yes, they are adjacent

11. $\angle MQN$ and $\angle MQR$ are vertical angles. No, they are adjacent

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.



① Olive & main are complementary

Beacon ⊥ Main