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## 1-5 Practice <br> Angle Relationships

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

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 $\angle F G C$.
4. Name an angle adjacent and supplementary to $\angle D C B$.
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 $m \angle F G E=5 x+10$, find $x$ so that $\overleftrightarrow{F C} \perp \overleftrightarrow{A E}$.
8. If $m \angle B G C=16 x-4$ and $m \angle C G D=2 x+13$, find $x$ so that $\angle B G D$ is a right angle.


Determine whether each statement can be assumed from the figure. Explain.
9. $\angle N Q O$ and $\angle O Q P$ are complementary.
10. $\angle S R Q$ and $\angle Q R P$ is a linear pair.

11. $\angle M Q N$ and $\angle M Q R$ 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.


