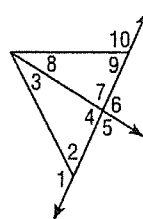


5-2 Practice***Inequalities and Triangles***

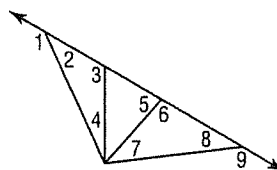
Determine which angle has the greatest measure.

1. $\angle 1, \angle 3, \angle 4$
2. $\angle 4, \angle 8, \angle 9$
3. $\angle 2, \angle 3, \angle 7$
4. $\angle 7, \angle 8, \angle 10$



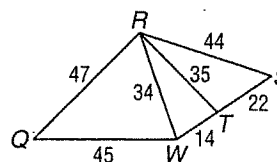
Use the Exterior Angle Inequality Theorem to list all angles that satisfy the stated condition.

5. all angles whose measures are less than $m\angle 1$
6. all angles whose measures are less than $m\angle 3$
7. all angles whose measures are greater than $m\angle 7$
8. all angles whose measures are greater than $m\angle 2$



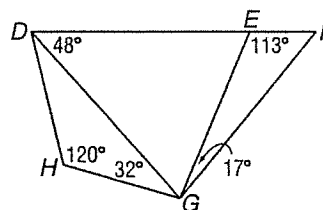
Determine the relationship between the measures of the given angles.

9. $m\angle QRW, m\angle RWQ$
10. $m\angle RTW, m\angle TWR$
11. $m\angle RST, m\angle TRS$
12. $m\angle WQR, m\angle QRW$



Determine the relationship between the lengths of the given sides.

13. $\overline{DH}, \overline{GH}$
14. $\overline{DE}, \overline{DG}$
15. $\overline{EG}, \overline{FG}$
16. $\overline{DE}, \overline{EG}$



17. **SPORTS** The figure shows the position of three trees on one part of a Frisbee™ course. At which tree position is the angle between the trees the greatest?

