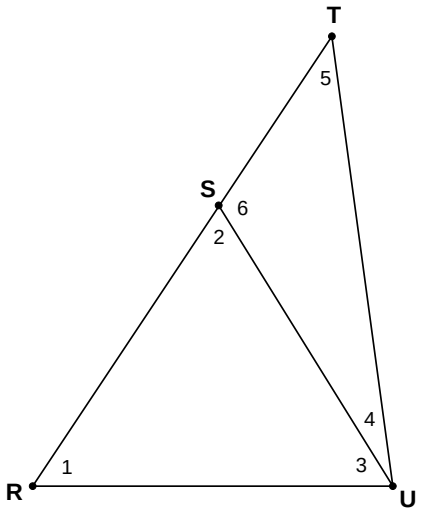
Name _____ Date_____ Period_____

Classwork 1-4 Angles

Refer to the figure below and answer the following questions.



1. List all of the angles that have *S* as a vertex.

_____

2. Name a straight angle.

_____

3. Name an obtuse angle.

_____

4. Does $\angle SRU$ appear to be obtuse, straight, right, or acute?

_____

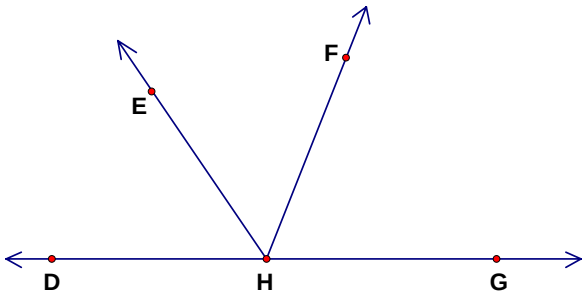
6. If $m\angle 3 = 48°$ and $m\angle 4 = 23°$, then find $m\angle RUT$.

_____

7. If $m\angle 6 = 177°$, then find $m\angle 2$.

_____

Refer to the figure below and answer the following questions.



8. If $m\angle EHF = 61°$, $m\angle FHG = 2x$, and $m\angle EHG = 133°$, then solve for *x*.

$x =$_____

9. If $m\angle DHF = 109°$ and $m\angle FHG = x - 8$, then solve for *x*.

$x =$_____

10. If $\overrightarrow{HE}$ bisects $\angle DHF$, $m\angle DHE = 5x - 10$, $m\angle FHE = 2x + 35$, then find *x* and $m\angle DHE$.

$x =$_____ $m\angle DHE =$_____

11. If $m\angle EHF = 2x - 9$, $m\angle FHG = 3x + 12$, and $m\angle EHG = 2x + 78$, then solve for *x* and $m\angle EHG$.

$x =$_____ $m\angle EHG =$_____

Classwork 1-4 Angles

12. P is in the interior of $\angle TED$. If $m\angle TEP = 5x + 4$, $m\angle TED = 9x - 48$, and $m\angle PED = x + 20$, then find x and the measure of all three angles.

13. $\overrightarrow{TR}$ bisects $\angle WTG$. If $m\angle WTR = 4x + 12$ and $m\angle RTG = 9x - 13$, then find x and the measure of all three angles.