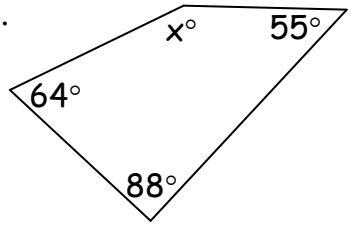
Geometry G

Name Key

6.2 Homework

Solve for x in each figure.

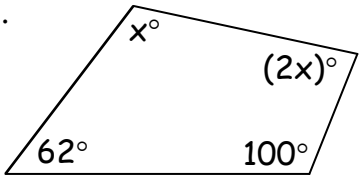
1.



$360° - 207°$

$153°$

2.



$3x + 162 = 360$

$3x = 198$

$x = 66$

3. Find the measure of each angle in quadrilateral RSTU if $m\angle R = 3x$, $m\angle S = 2x - 9$, $m\angle T = x + 8$, and $m\angle U = 37$.

$3x + 2x - 9 + x + 8 + 37 = 360$

$6x + 36 = 360$

$6x = 324$

$x = 54$

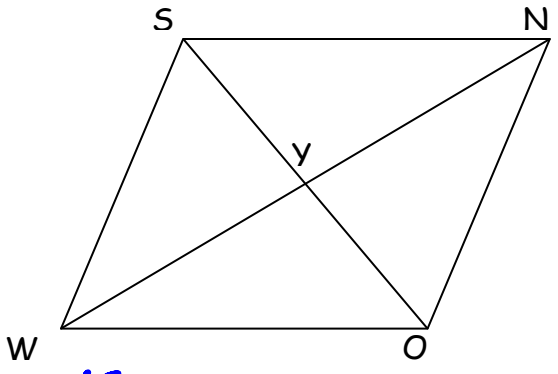
$m\angle R =$ 162°

$m\angle S =$ 99°

$m\angle T =$ 62°

$m\angle U =$ 37°

Given that SNOW is a parallelogram, answer the following.



4. $\overline{SN} \parallel$ $\overline{WO}$

5. $\overline{NO} \cong$ $\overline{SW}$

6. $\overline{SY} \cong$ $\overline{YO}$

7. $\angle WSN \cong \angle$ WON

8. $\angle WON$ is supplementary to $\angle$ SWO or $\angle$ ONS

9. If SW = 12, then NO = 12

10. If WY = 8, then WN = 16

11. If $m\angle SWO = 72°$, then $m\angle SNO =$ 72° and $m\angle NSW =$ 108°

12. If $m\angle WYS = 87°$, then $m\angle WYO =$ 93°