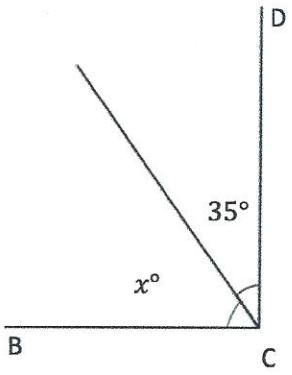
Name _____ Date _____

Write an equation and solve for the measurement of $\angle x$. Verify the measurement using a protractor.

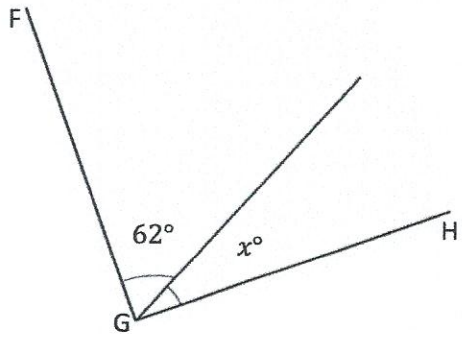
1. $\angle DCB$ is a right angle.



55° + 35° = 90°

$x°$ = 55°

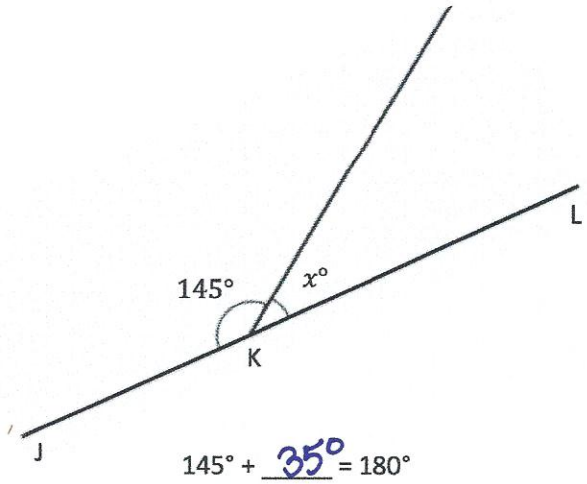
2. $\angle HGF$ is a right angle.



62° + 28° = 90°

$x°$ = 28°

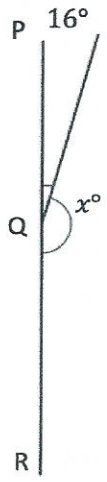
3. $\angle JKL$ is a straight angle.



145° + 35° = 180°

$x°$ = 35°

4. $\angle PQR$ is a straight angle.

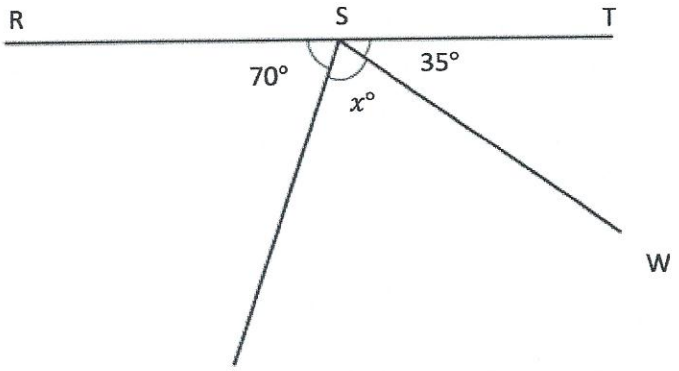


16° + 164° = 180°

$x°$ = 164°

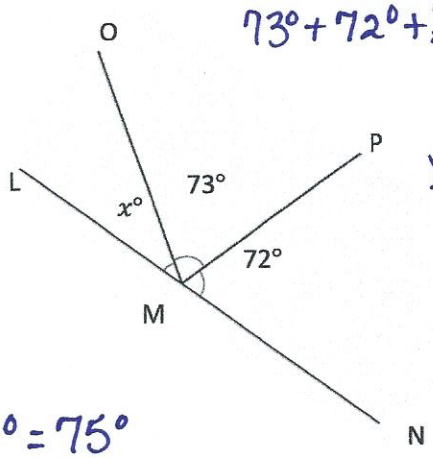
Write an equation and solve for the unknown angle measurements.

5. Solve for the measurement of $\angle USW$.
   $\angle RST$ is a straight angle.



$70° + 35° + 75° = 180°$ $x° = 75°$

6. Solve for the measurement of $\angle OML$.
   $\angle LMN$ is a straight angle.

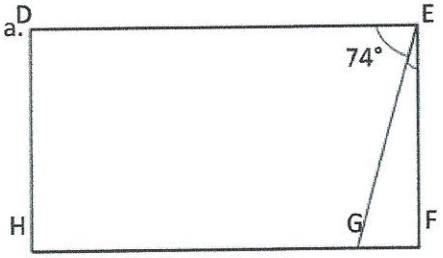


$73° + 72° + 35° = 180°$

$x° = 35°$

7. In the following figure, $DEFH$ is a rectangle. Without using a protractor, determine the measurement of $\angle GEF$. Write an equation that could be used to solve the problem.

a.

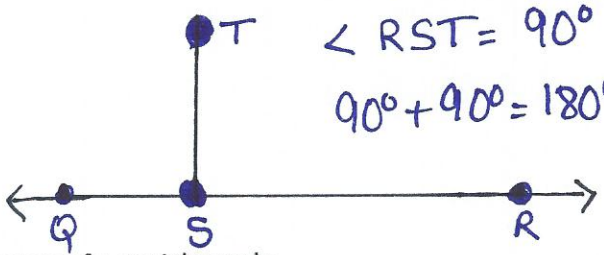


$74° + 16° = 90°$

$\angle GEF = 16°$

8. Complete the following directions in the space to the right.

   a. Draw 2 points: Q and R. Using a straightedge, draw $\overleftrightarrow{QR}$.
   b. Plot a point S somewhere between points Q and R.
   c. Plot a point T, which is not on $\overleftrightarrow{QR}$.
   d. Draw $\overline{TS}$.
   e. Find the measure of $\angle QST$ and $\angle RST$.
   f. Write an equation to show that the angles add to the measure of a straight angle.



$\angle QST = 90°$

$\angle RST = 90°$

$90° + 90° = 180°$