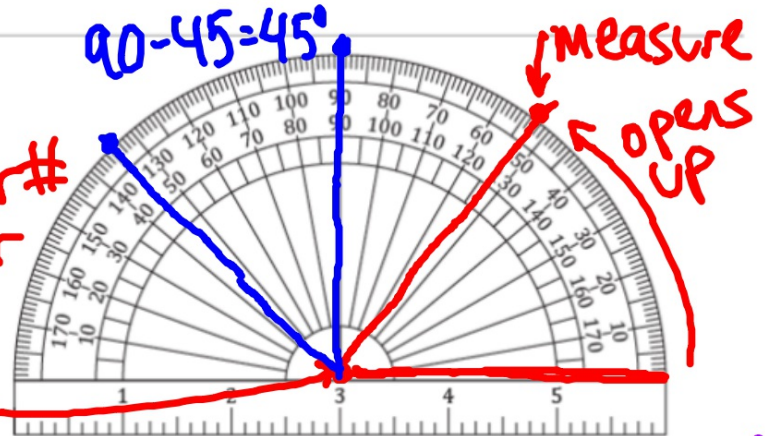


Questions

Protractor Postulate:

acute  $\Rightarrow$  use smaller #  
 obtuse  $\Rightarrow$  use bigger #  
 vertex



Example 3:

Find the measure of each angle and classify it as acute, right, obtuse or straight.

a)  $m\angle CBH$  acute  $37^\circ$  (between 30 and 40)

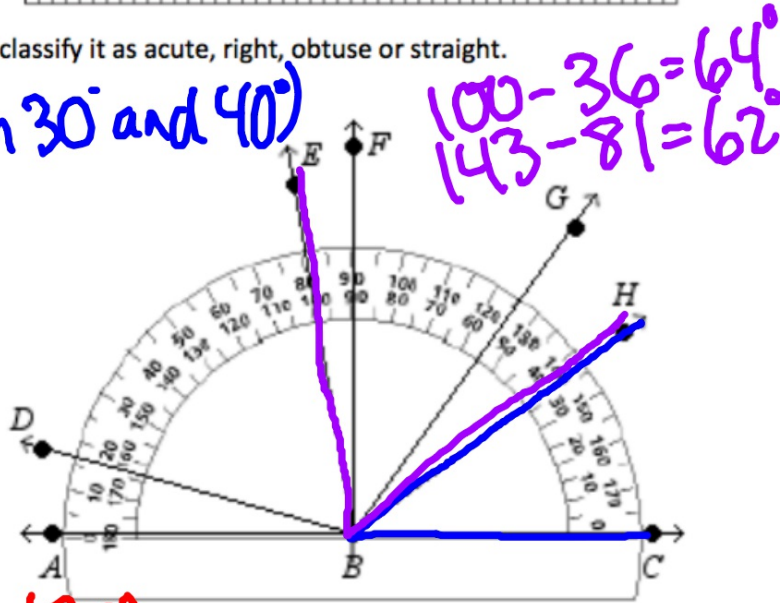
b)  $m\angle CBF$  right  $90^\circ$

c)  $m\angle ABE$  acute  $81^\circ$

d)  $m\angle HBE$  acute  $63^\circ$

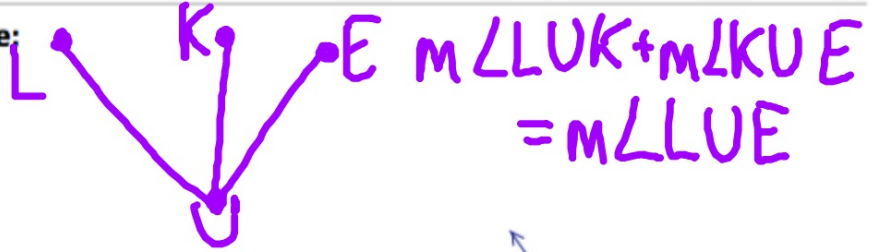
e)  $m\angle DBC$  obtuse  $164^\circ$

f)  $m\angle ABC$  straight  $180^\circ$



Questions

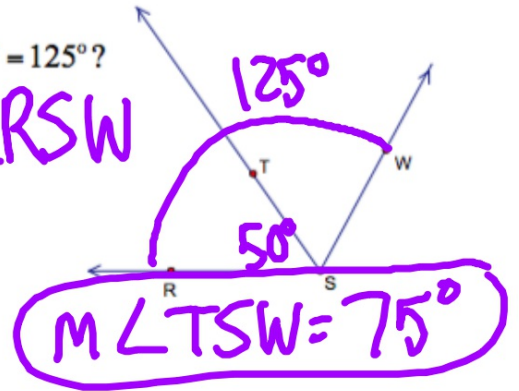
Angle Addition Postulate:



Example 4:

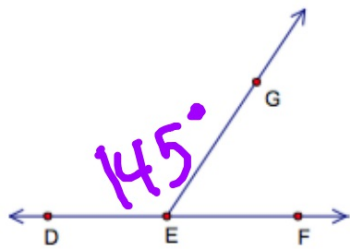
What is the  $m\angle TSW$  if  $m\angle RST = 50^\circ$  and  $m\angle RSW = 125^\circ$ ?

$$\begin{aligned}
 m\angle RST + m\angle TSW &= m\angle RSW \\
 50 + m\angle TSW &= 125 \\
 \underline{-50} \qquad \qquad \underline{-50}
 \end{aligned}$$



Example 5:

If  $m\angle DEG = 145^\circ$ , find  $m\angle GEF$ .



$$\begin{aligned}
 145 + m\angle GEF &= 180 \\
 \boxed{m\angle GEF = 35^\circ}
 \end{aligned}$$

↑  
Straight

## Questions

### Example 6:

Find the measure of each angle and classify them:

a.  $\angle EBF$

$51^\circ$   
acute

b.  $\angle EBA$

$90^\circ$   
right

c.  $\angle DBE$

$17^\circ$   
acute

d.  $\angle DBC$

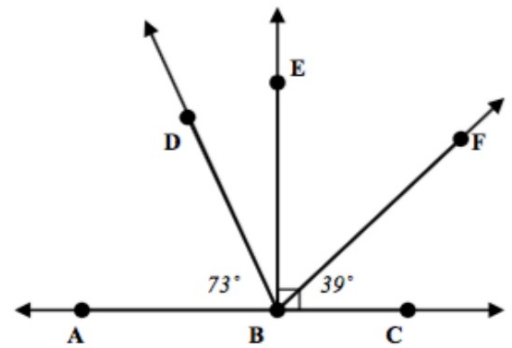
$107^\circ$   
obtuse

e.  $\angle ABF$

$140^\circ$  obtuse

f.  $\angle DBF$

$68^\circ$  acute



Summary: