

GEOMETRY 2: LINES, RAYS, SEGMENTS & ANGLES

1. Use a protractor to draw the following angles. Label all parts.

a.  $\angle ABC = 40^\circ$

b.  $\angle DEF = 155^\circ$

c.  $\angle GHI = 270^\circ$

d.  $\angle JKL = 350^\circ$

2. Classify the angles in the figure below as acute, right, obtuse, straight or reflex.

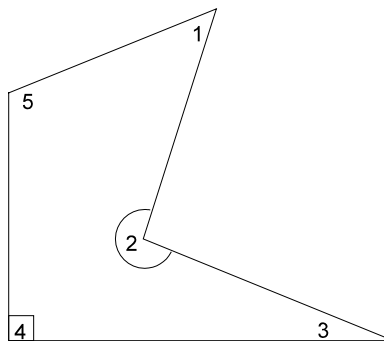
$\angle 1$  is

$\angle 2$  is

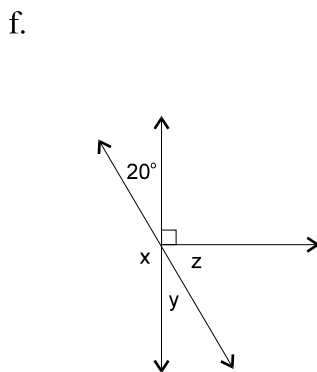
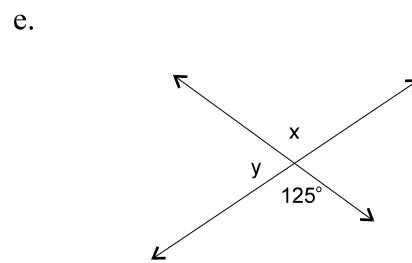
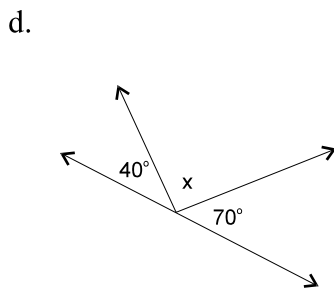
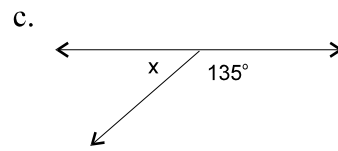
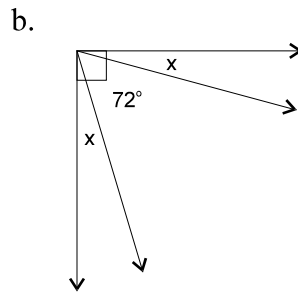
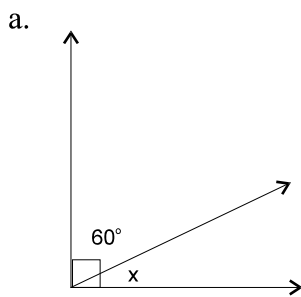
$\angle 3$  is

$\angle 4$  is

$\angle 5$  is



3. Find the angle marked x, y or z in each of the following. Do not use a protractor.



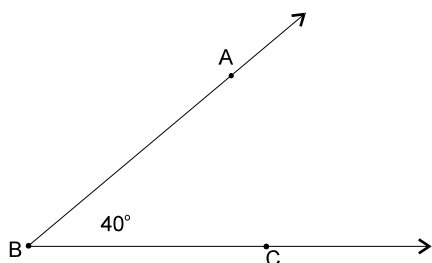
4. a.  $\angle A$  and  $\angle B$  are vertically opposite and  $\angle B = 132^\circ$ .  $\angle A = \underline{\hspace{2cm}}$

b.  $\angle C$  and  $\angle D$  are complimentary and  $\angle C = 89^\circ$ .  $\angle D = \underline{\hspace{2cm}}$

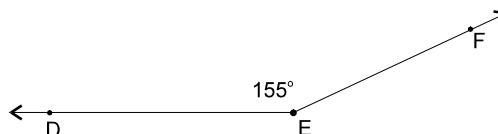
c.  $\angle E$  and  $\angle F$  are congruent and supplementary.  $\angle E = \underline{\hspace{2cm}}$   $\angle F = \underline{\hspace{2cm}}$

ANSWER KEY

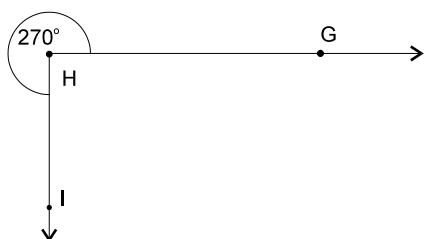
1. a.



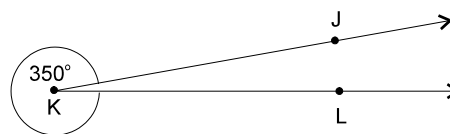
b.



c.



d.



2.  $\angle 1$  is acute  $\angle 2$  is reflex  $\angle 3$  is acute  $\angle 4$  is right  $\angle 5$  is obtuse

3. a.  $x = 30^\circ$  b.  $x = 9^\circ$  c.  $x = 45^\circ$  d.  $x = 70^\circ$  e.  $x = 125^\circ, y = 55^\circ$   
 f.  $x = 160^\circ, y = 20^\circ, z = 70^\circ$

4. a.  $\angle A = 132^\circ$  b.  $\angle D = 1^\circ$  c.  $\angle E = 90^\circ$  and  $\angle F = 90^\circ$

Source: Government of BC used with permission.