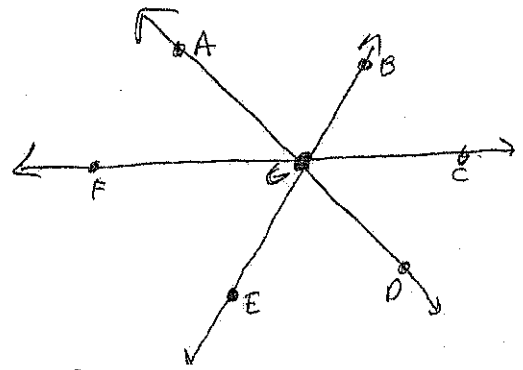
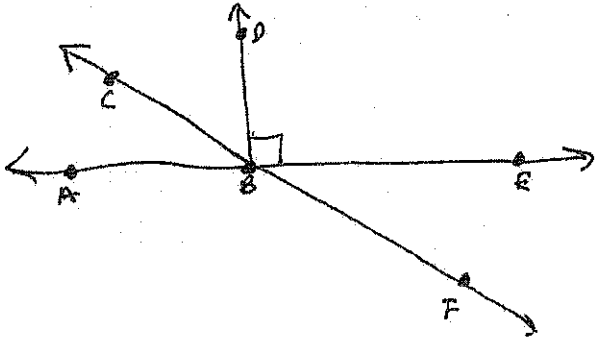
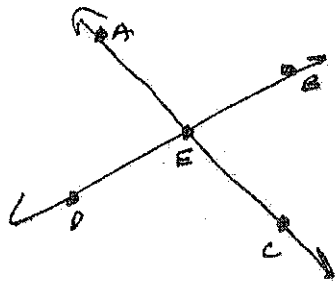


1. Name an angle complementary to  $\angle ABC$ .  $\angle CBD$  3. Name the vertical angle pairs in the image below.
2. Name an angle supplementary to  $\angle ABC$ .  $\angle CBE$   
or  
 $\angle ABF$



$\angle AGF$  and  $\angle CGD$   
 $\angle AGB$  and  $\angle EGD$   
 $\angle BGE$  and  $\angle EGF$

5. State whether each statement is true or false.



- $\angle AEB$  and  $\angle AED$  are vertical angles. F
- $\angle BEC$  and  $\angle AED$  are vertical angles. T
- $\angle AEB$  and  $\angle DEC$  are a linear pair. F

4. Using the same image as 3:  
Name two adjacent angles to  $\angle EGD$ .

$\angle DGC$   
 $\angle EGF$

6.  $\angle ABC$  and  $\angle DEF$  are supplementary angles.  
 $m\angle ABC = 4x + 10$  and  $m\angle DEF = 6x + 20$ .  
 What are the degree measures of each angle.

$$4x + 10 + 6x + 20 = 180$$

$$10x + 30 = 180$$

$$10x = 150$$

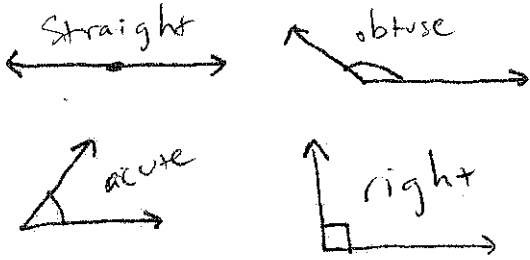
$$x = 15$$

$\angle ABC = 4(15) + 10 = 70^\circ$

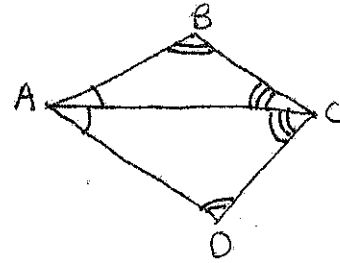
$\angle DEF = 6(15) + 20 = 110^\circ$

7. The complement of an angle is  $20^\circ$ .  
 What is the measure of that angle?  
 $90 - 20 = 70^\circ$

1. Classify each of the following angles.

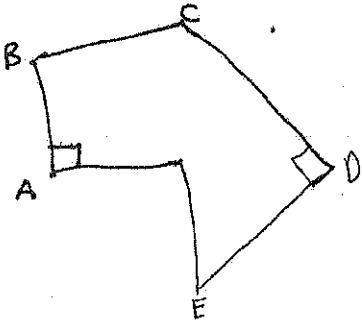


2. Complete the statements using the image below.



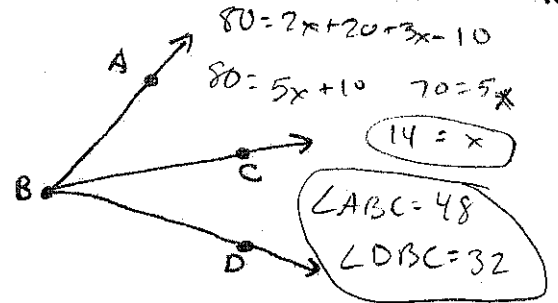
$\angle B \cong \angle D$   
 $\angle BAC \cong \angle DAC$   
 $\angle DCA \cong \angle BCA$

3. Classify each of the angles in the picture.

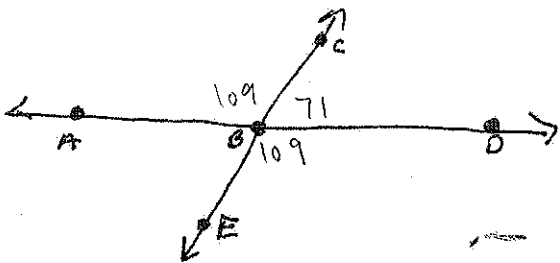


$\angle A$  right  
 $\angle B$  obtuse  
 $\angle C$  obtuse  
 $\angle D$  right  
 $\angle E$  acute

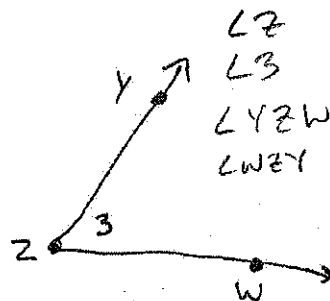
4. If  $m\angle ABD = 80^\circ$ ;  $m\angle ABC = 2x + 20$  and  $m\angle DBC = 3x - 10$ . Find the degree measure of  $\angle ABC$  and  $\angle DBC$ .



5. If  $m\angle ABC = 109$ , then what are measures  $\angle DBC$  and  $\angle EBD$ ?



6. What are four names for the angle below.



7.  $\angle A$  and  $\angle B$  are complementary angles.  $m\angle A = 3x$  and  $m\angle B = 2x - 10$ . What are the degree measures of  $\angle A$  and  $\angle B$ ?

$3x + 2x - 10 = 90$   
 $5x = 100$   
 $x = 20$

$\angle A = 60$   
 $\angle B = 30$