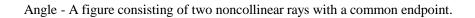
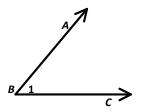
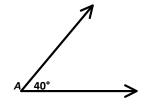
## Angle Measure

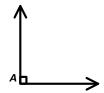


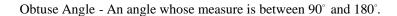


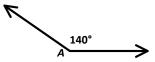
Acute Angle - An angle whose measure is between  $0^\circ$  and  $90^\circ.$ 



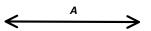
Right Angle - An angle whose measure is  $90^{\circ}$ .

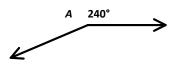




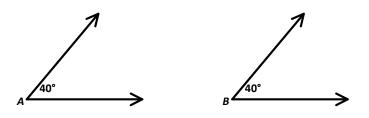


Straight Angle - An angle whose measure is  $180^{\circ}$ .

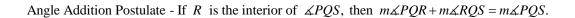


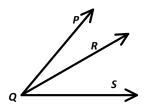


Congruent Angles - Angles that have the same measure.

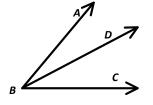


<u>Protractor Postulate</u> - Given  $\overrightarrow{AB}$  and a number r between 0° and 180°, there is exactly one ray with endpoint A, extending on either side of  $\overrightarrow{AB}$ , such that the measure of the angle formed is r.

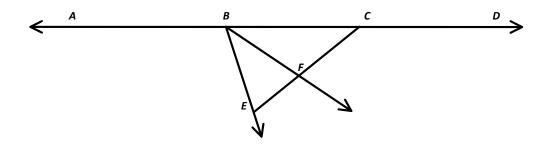




Angle Bisector -  $\overrightarrow{BD}$  is the bisector of  $\measuredangle ABC$  if D is in the interior of the angle and  $\measuredangle ABD \cong \measuredangle CBD$ .

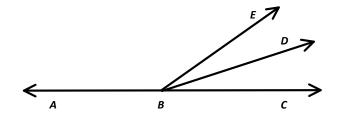


Directions: Refer to the figure below for questions 1-5.



- 1. Name two angles that have C as a vertex.
- 2. If  $\overrightarrow{BF}$  bisects  $\measuredangle CBE$ , name two congruent angles.
- 3. List all the angles that have B as the vertex.
- 4. Name a pair of opposite rays.
- 5. Name the sides of  $\measuredangle ABE$ .

Directions: Refer to the figure below for questions 6-10.  $\overrightarrow{BA}$  and  $\overrightarrow{BC}$  are opposite rays and  $\overrightarrow{BD}$  bisects  $\measuredangle CBE$ .



6. If  $m \measuredangle EBD = 3x - 4$  and  $m \measuredangle DBC = 2x + 1$ , find  $m \measuredangle EBD$ .

7. If  $m \measuredangle EBC = 5x + 6$  and  $m \measuredangle EBA = 3x + 10$ , find  $m \measuredangle EBA$ .

8. If  $m \measuredangle DBC = x + 4$  and  $m \measuredangle EBC = 7x - 12$ , find  $m \measuredangle EBD$ .

9. If  $m \measuredangle ABE = 2x + 40$  and  $m \measuredangle EBD = 3x$ , find  $m \measuredangle ABE$ .

10. If  $m \measuredangle EBC$  is a right angle and  $m \measuredangle DBC = 12x + 9$ , find  $m \measuredangle EBD$ .