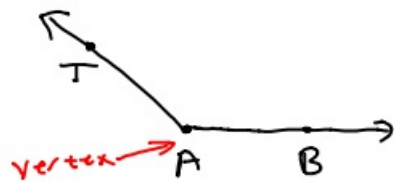
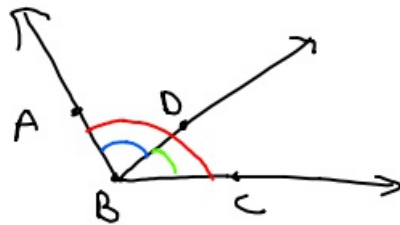


8-27-19 2nd Geo



$\angle \underline{BAT}$
or
 $\angle \underline{TAB}$

Name all angles you see



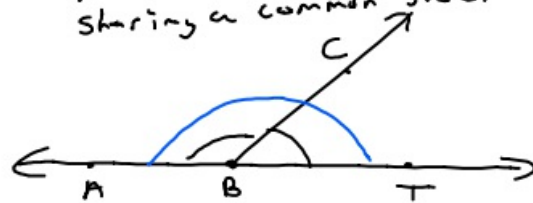
$\angle ABD$
 $\angle DBA$

$\angle ABC$
 $\angle CBA$

$\angle CBD$
 $\angle DBC$

Linear Pair

pair of angles that make a line sharing a common side.

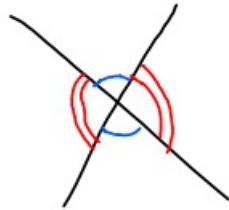


$\angle CBT$ & $\angle ABC$ are a linear pair.

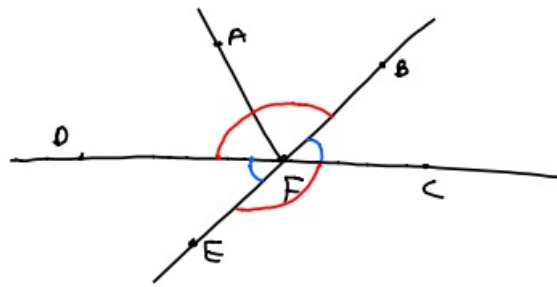
Complementary angles $\rightarrow 90^\circ$

Supplementary angles $\rightarrow 180^\circ$

Vertical Angles
Scissors



Name some vertical angles
in below

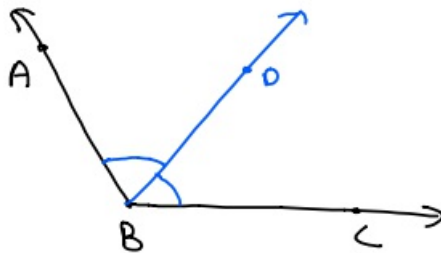


$\angle DFE \neq \angle BFC$

$\angle CFE \neq \angle BFD$

Bisecting Angles

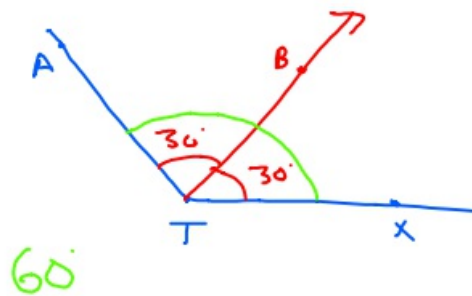
Cut Angle into 2 equal parts



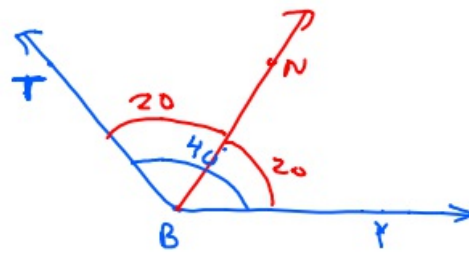
$\angle ABD = \angle CBD$

\vec{BD} bisects $\angle ABC$

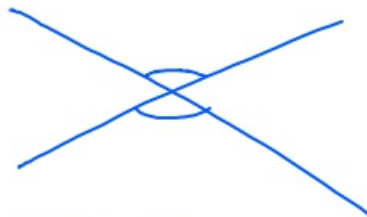
- ① \overrightarrow{TB} bisects $\angle ATX$. If $\angle XTB = 30^\circ$, what is $\angle ATX$?



- ② \overrightarrow{BN} bisects $\angle TBY$. If $\angle TBY = 40^\circ$, what is $\angle NBT$?



- ③ $\angle A$ and $\angle B$ are vertical angles. If $\angle A = 4n + 10$ and $\angle B = 2n + 20$, what is $\angle A$?



$$\angle A = \angle B$$

$$4n + 10 = 2n + 20$$

$$\begin{array}{r} -2n \quad -2n \\ \hline 2n + 10 = 20 \end{array}$$

$$\begin{array}{r} -10 \quad -10 \\ \hline 2n = 10 \end{array}$$

$$\frac{2n}{2} = \frac{10}{2}$$

$$n = 5$$

$$\begin{aligned} \angle A &= 4 \cdot n + 10 \\ &= 4 \cdot 5 + 10 \end{aligned}$$

$$\angle A = 30$$