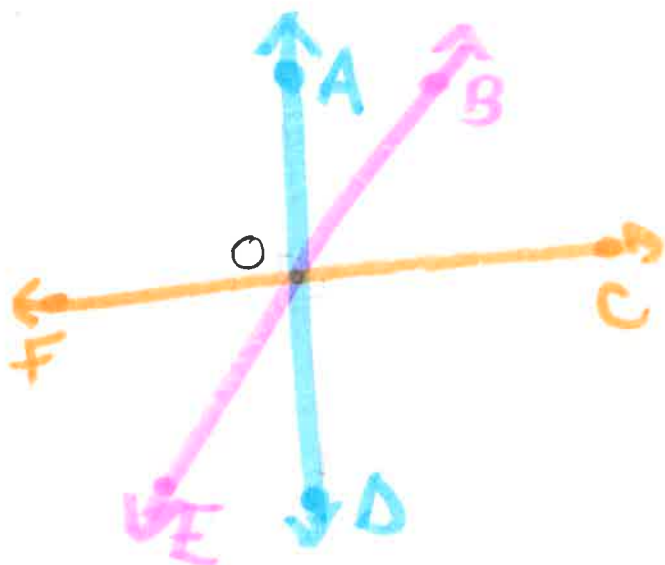


3 colors

$\overline{AD}$

$\overline{BE}$

$\overline{CF}$



Perpendicular lines intersect at right angles =  $90^\circ$

$\overline{AD}$  and  $\overline{FC}$  are perpendicular.

(So which angles are right angles?)

So  $\angle AOF$ ,  $\angle AOC$ ,  $\angle FOD$ ,  $\angle COD$  are right angles

(Name 2 angles that make up  $\angle FOD$ )

$\angle FOE$  and  $\angle EOD$  make up  $\angle FOD$

If angle  $\angle EOD$  is  $32^\circ$ , how many degrees is  $\angle FOE$ ?

(How do you know?)

$$\angle FOD - \angle EOD = \angle FOE$$
$$90 - 32 = 58$$

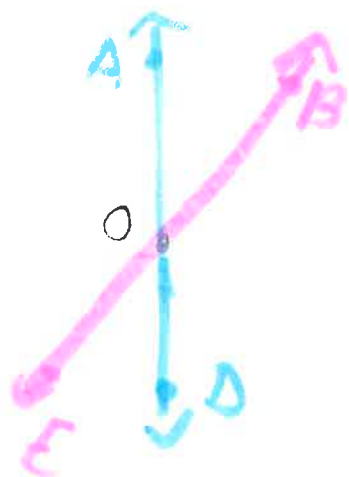
Angles whose measure add to  $90^\circ$  are complementary.

Angles whose measure add to  $180^\circ$  are called supplementary. When drawn next to each other, they form a straight line.

(Which sets of angles are supplementary?)

$\angle AOF + \angle FOD$  are supplementary among others

Draw  $\overline{AD}$  and  $\overline{BE}$



When 2 lines intersect they form pairs of vertical angles. Vertical angles are those across from each other like  $\angle AOB$  and  $\angle EOD$   
 $\angle AOE$  and  $\angle BOD$

Vertical angles are congruent - they have the same angle measure

Since  $\angle EOD$  is  $32^\circ$ , we know  $\angle AOB$  is  $32^\circ$