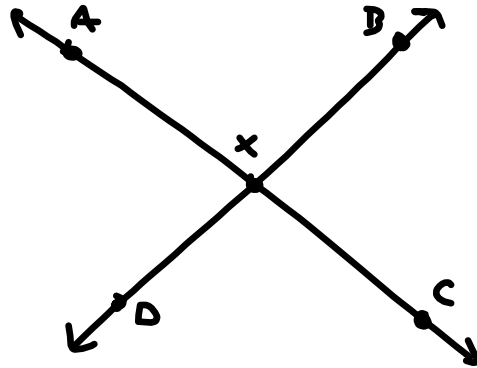


## Section 1.8 Pairs of Angles

Obj: Identify and use adjacent angles, vertical angles, complementary angles, supplementary angles, and linear pairs

### Adjacent Angles

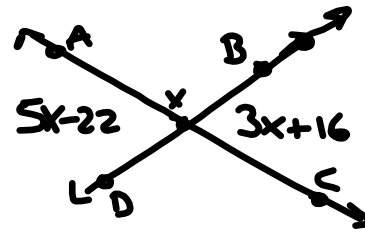
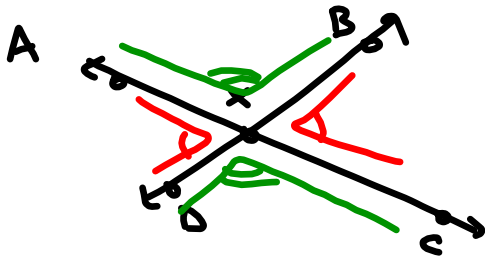
- angles who share a common <sup>side</sup> and vertex, but have no common interior points



$\angle AXD$  and  $\angle AXB$  are adjacent  
 $\angle BXC$  and  $\angle DXC$   
 $\angle AXB$  and  $\angle BXC$   
 $\angle CXD$  and  $\angle DXA$

## Vertical Angles

Vertical angles share a vertex, are non-adjacent, and are formed by two intersecting lines.



$$5x - 22 = 3x + 16$$

$$2x - 22 = 16$$

$$2x = 38$$

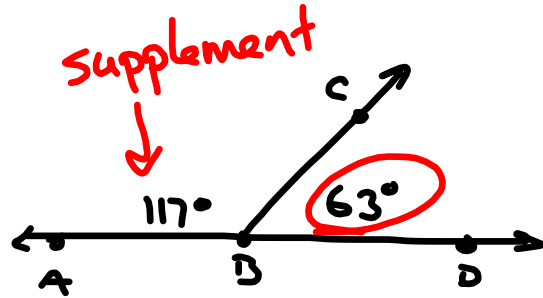
$$x = 19$$

$$m\angle A \text{ or } D = ? \quad 73^\circ$$

$$m\angle A \text{ or } B = ? \quad 107^\circ$$

## Supplementary Angles

Two angles whose measure adds to  $180^\circ$



\* if they are adjacent

Linear Pair

## Complimentary angles

Two angles whose measure add up to  $90^\circ$

pg 52

1-3 all

17-25 all

26-32 even

40-46 all