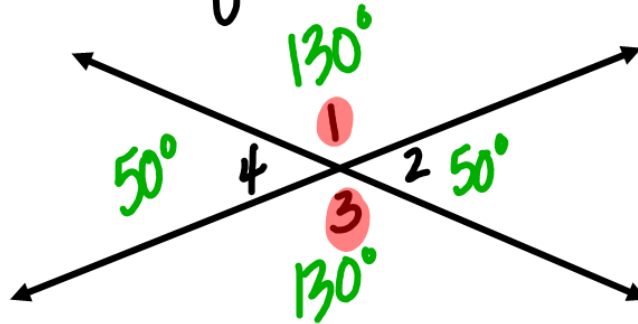


4.2

Vertical Angles



Pairs

 $\angle 1$ and $\angle 3$ $\angle 2$ and $\angle 4$

Vertical \angle s
are the same
measure

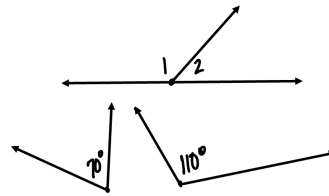
Vertical Angles are congruent

Congruent \cong

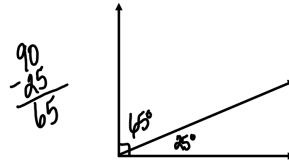
$$\angle 1 \cong \angle 3$$

$$\angle 2 \cong \angle 4$$

Supplementary Angles
Two \angle s whose sum 180°



Complementary Angles
2 \angle s whose sum is 90°



Angle	Complement
10°	80° $90 - 10$
20°	70° $90 - 20$
30°	60° $90 - 30$
40°	50° $90 - 40$
50°	40° $90 - 50$
60°	30° $90 - 60$
70°	20° $90 - 70$
80°	10° $90 - 80$
x°	$90 - x$

$$x = 20$$

$$90 - 20 = 70^\circ$$

Angle	Supplement
10°	170° $180 - 10$
20°	160° $180 - 20$
30°	150° $180 - 30$
x	$180 - x$

$$x = 40$$

$$180 - 40 = 140$$

~~90~~ Complementary

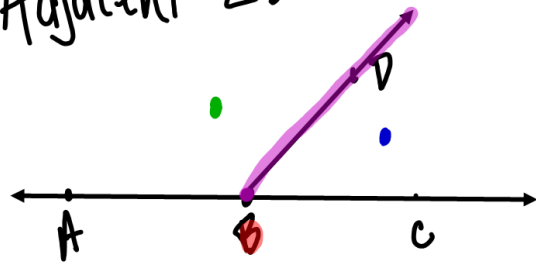
90°

~~180~~ Supplementary

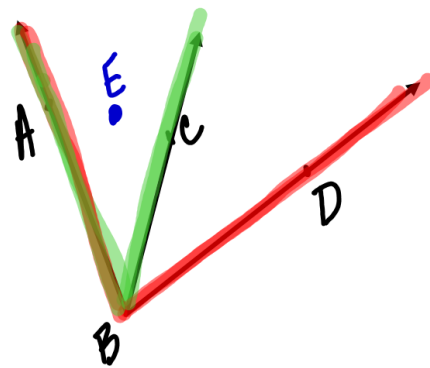
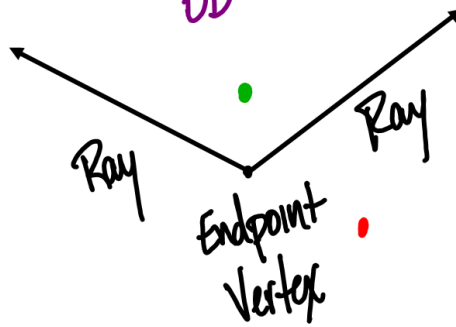
180°

Supplementary

Adjacent \angle s



$\angle ABD$ $\angle DBC$
BD



$\angle ABD$ $\angle ABC$
Not Adjacent

Acute \angle measure less than 90°

Right \angle measure = 90°

Obtuse \angle measure greater than 90°

Straight \angle measure = 180°
line

p 213
1, 2

7-31 All

42-56 Even

Notes 4.3 p216