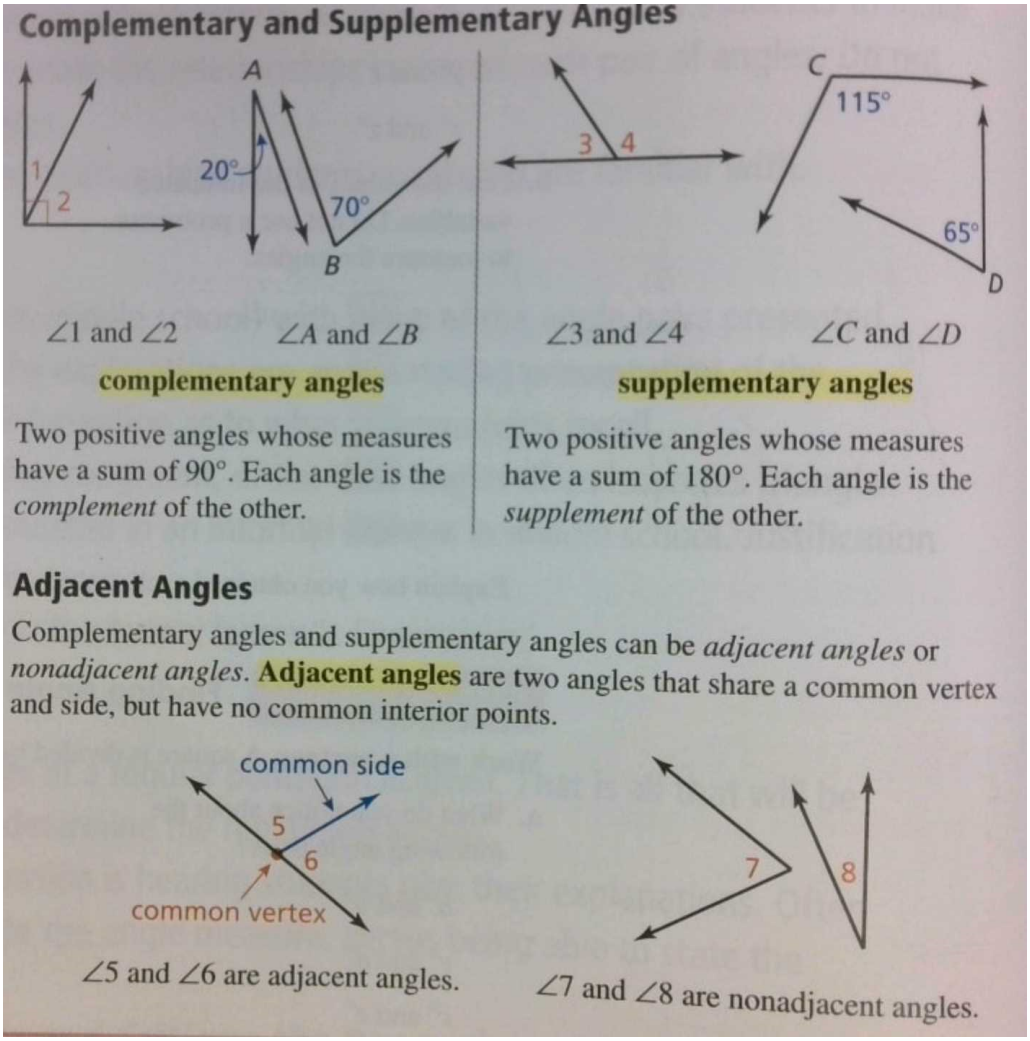
Geometry: 1.6 Angle Pairs



Complimentary: Add to 90 degrees.

Supplementary: Add to 180 degrees.

Adjacent: Share a vertex & side.

Angles ∠ABC and ∠KJF are Complimentary. m∠KJF = 37.5°. Find m∠ABC.

∠ABC + ∠KJF = 90°

∠ABC + 37.5° = 90°

−37.5 −37.5

m∠ABC = 52.5°

Angles ∠FGH and ∠POT are Supplimentary. m∠FGH = 61.3°. Find m∠POT.

∠FGH + ∠POT = 180°

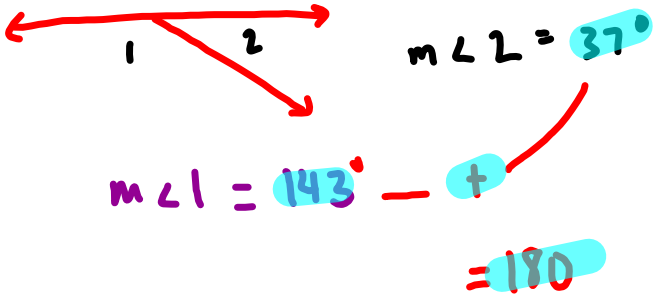
61.3° + ∠POT = 180°

−61.3° −61.3°

m∠POT = 118.7°

Ex: Angle 2 is a compliment of Angle 1. Find m∠2.

Ex: Angle 1 is a Supplement of Angle 2. Find m∠1.

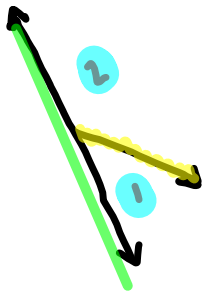


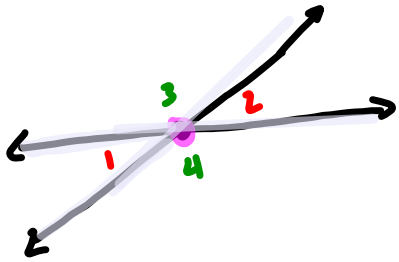
1.6 Describing Angle Pairs

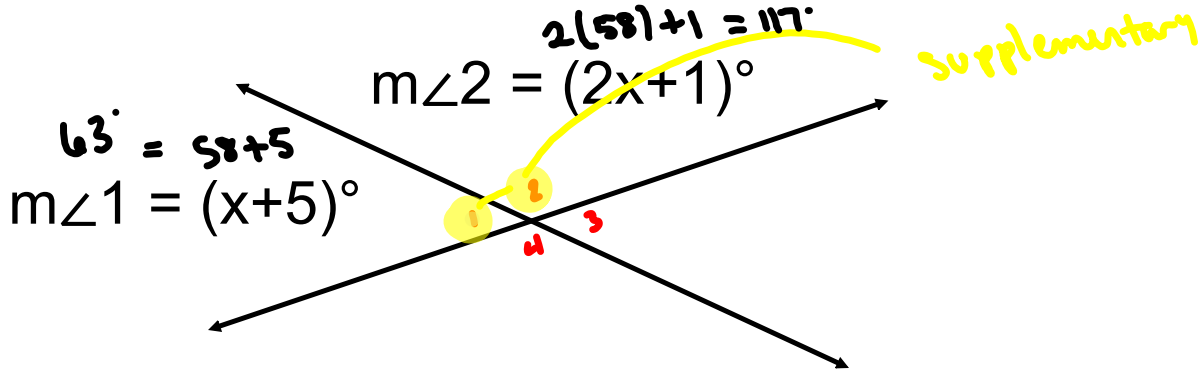
Vocab:

Linear Pairs: Supplimentary Angles that share a common side.

Vertical Angles: 2 equal angles formed by sides extended through the vertex.







Ex: Find the value of x.

$x+5+2x+1=180$

$3x+6=180$

$-6 \quad -6$

$\frac{3x}{3}=\frac{174}{3}$

$x=58°$

Find the measure of angle 3.

$m\angle 1 = m\angle 3$ b/c they are vertical angles

so $m\angle 3 = 63°$

Find the measure of angle 4.

$m\angle 2 = m\angle 4$ b/c they are vertical angles

so $m\angle 4$ is $117°$

Homework:

Pages 50-51

Numbers: 7-14, 17-19, 21

On 17 and 18 you don't need to write down your reasoning.

Attachments

MSOfficePNG.png