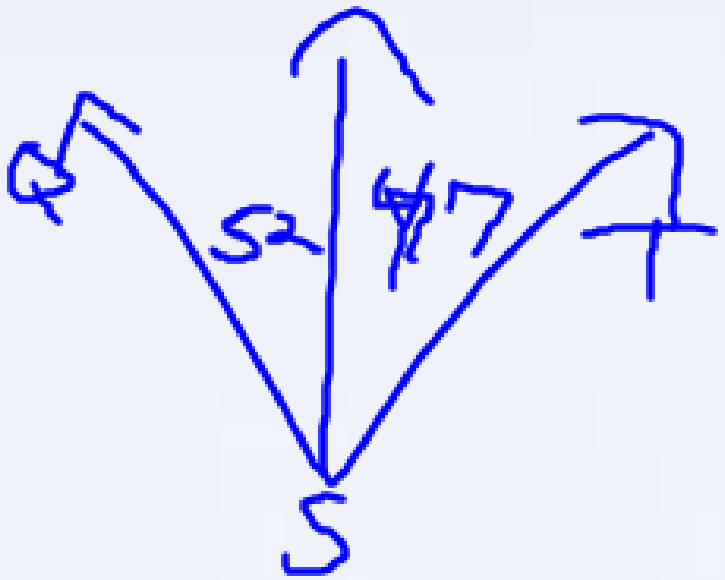
Pg.29 #6-10, 22, 23, 25, 26

Due Today!!

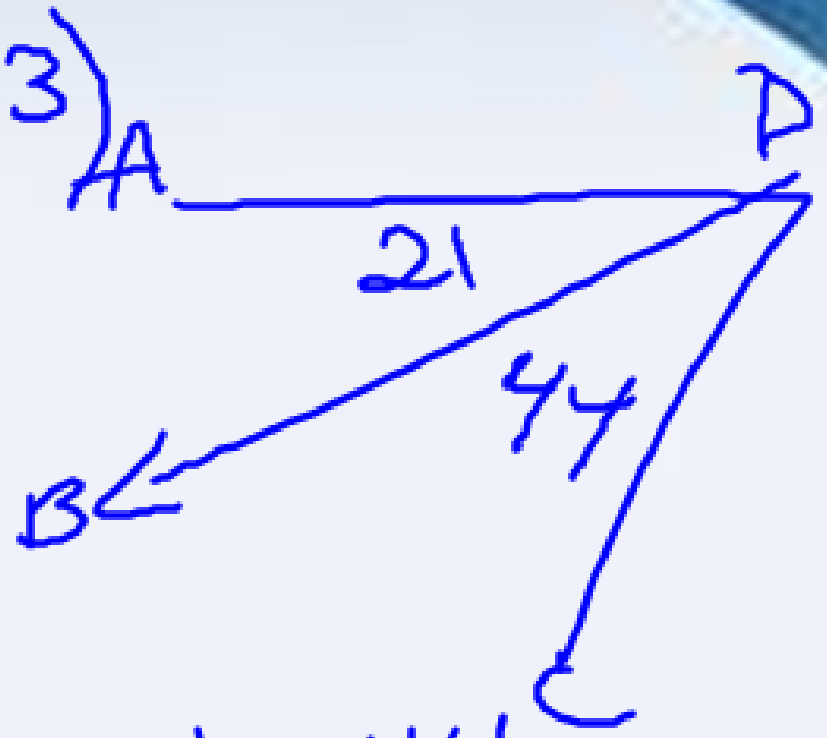
22)



$52 + 47$

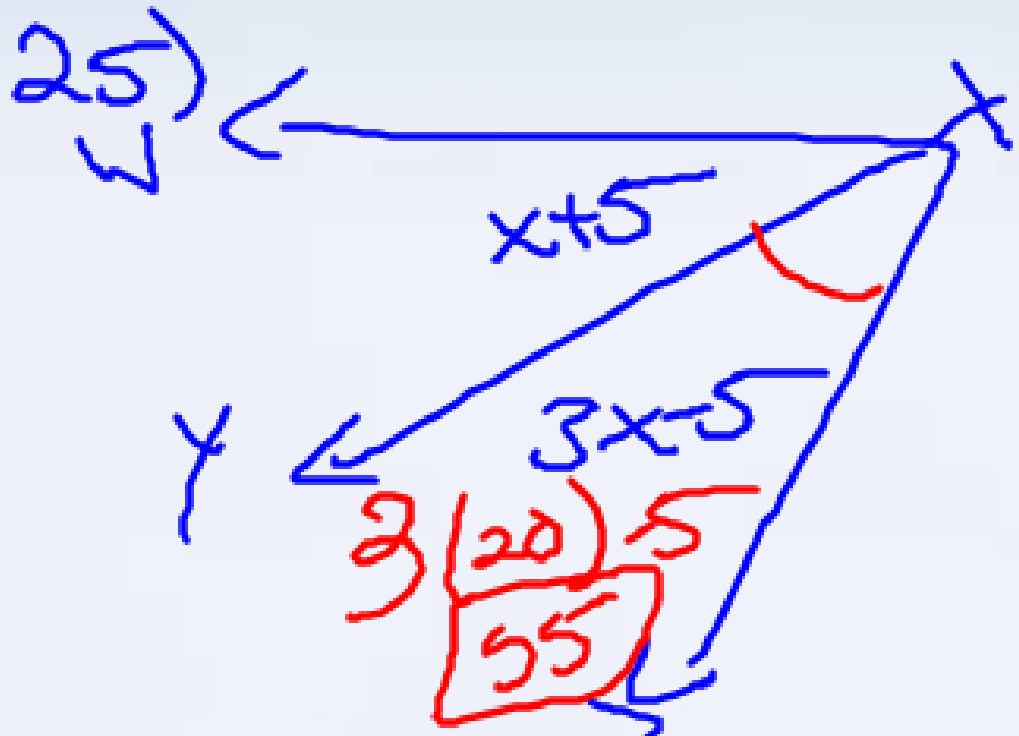
$= 99$

23)



$21 + 44$

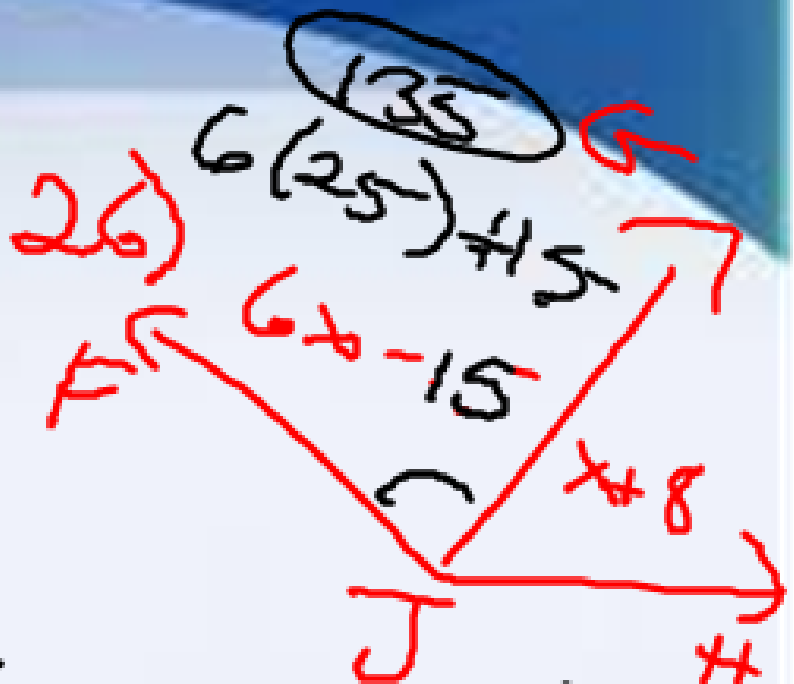
$= 65$



$x+5+3x-5=80$

$4x=80$

$x=20$



$6x-15+x+8=168$

$7x+17=168$

$-17 \quad -17$

$7x=175$

$\frac{7x}{7}=\frac{175}{7}$

$x=25$

Go Over Homework

Geo p. 29 #6-10, 22, 23, 25, 26.

6) ∠QRS, ∠SRT, ∠QRT

7) straight 8) acute 9) right 10) obtuse.

22) $m\angle QST = 52 + 47$

$= 99°$

23) $m\angle ADC = 21 + 44$

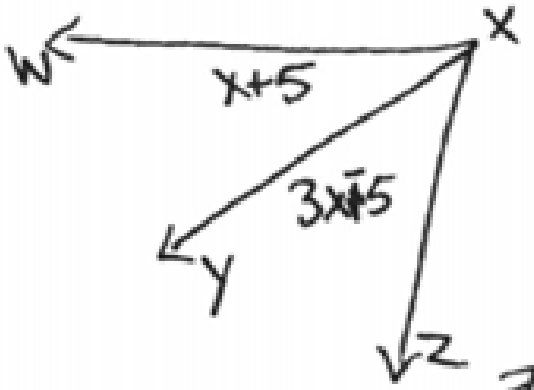
$= 65°$

Go Over Homework

25) $x+5+3x-5=80$

$4x = 80$

$x = 20$



$m\angle WXZ = 80°$

Find $m\angle YXZ$

$3x-5$

$3(20)-5$

$= 55°$

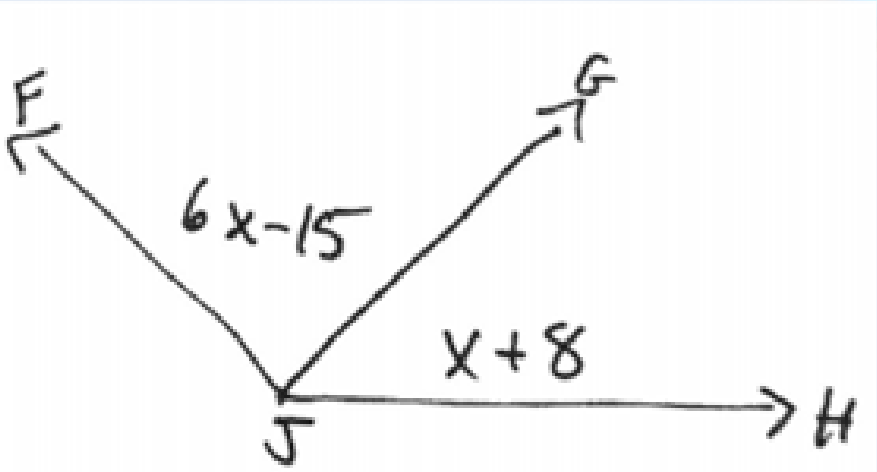
Go Over Homework

26) $6x - 15 + x + 8 = 168$

$7x - 7 = 168$

$7x = 175$

$x = 25$



$m\angle FJH = 168$ Find $\angle FJG$

$6x - 15$

$6(25) - 15$

$= 135^\circ$

Section 1.5

Describe Angle Pair Relationships

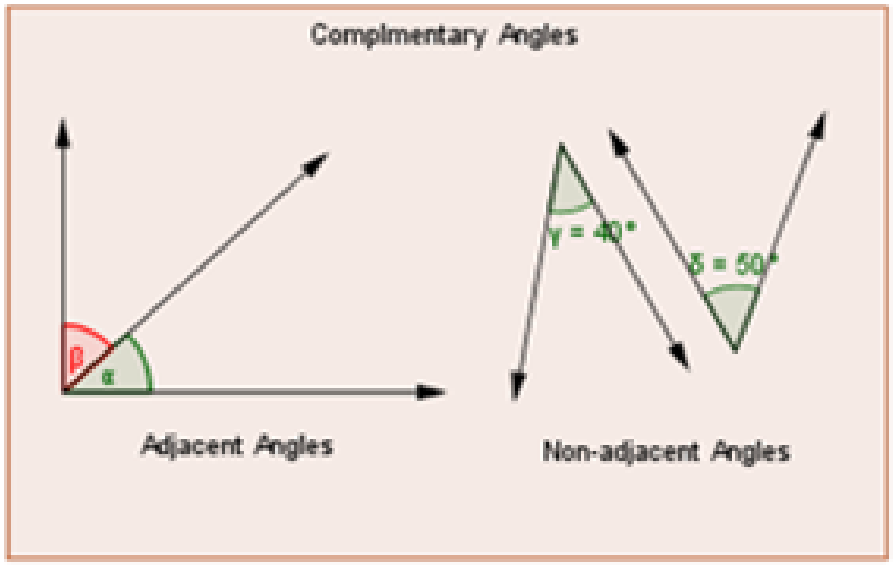
Vocabulary

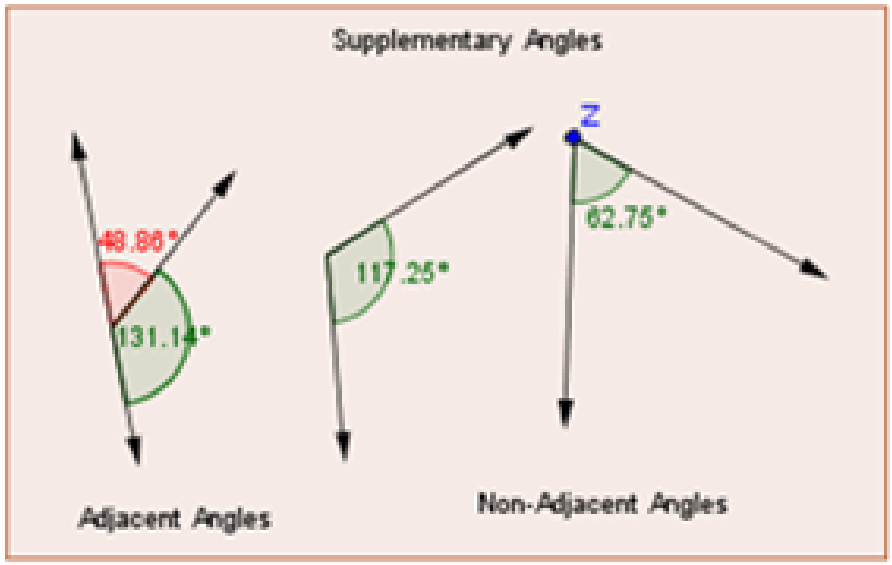
90 = corner

Complementary Angles are a pair of angle whose sum is 90

Supplementary Angles are a pair of angles whose sum is 180

180 = SU straight



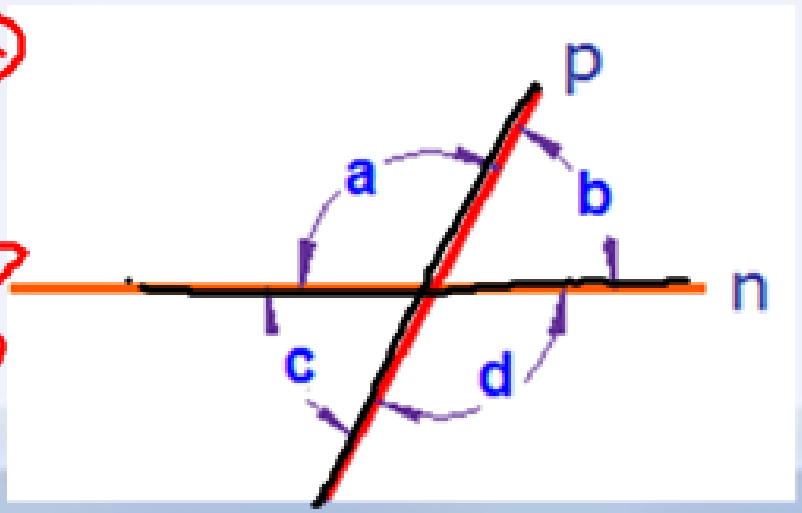


Adjacent angles are a pair angles have a common side and a common vertex (corner point) and don't overlap. a & b, c & d, b & d, a & c.

Linear Angles are a pair of adjacent supplementary angles. a & c, b & d, c & d, b & a.

Vertical Angles are a pair of angles whose sides form opposite rays. (are across from one another)

$\overrightarrow{AB}$ $\overrightarrow{AC}$



Example 1

Given that ∠1 is a complement of ∠2 and m∠2 = 57, Find m∠1.

$$\angle 1 + \angle 2 = 90$$

$$\angle 1 + 57^\circ = 90^\circ$$

$$-57 \qquad -57$$

$$\angle 1 = 33$$

Given that ∠3 is a supplement of ∠4 and m ∠4 = 41, Find m∠ 3.

$$\angle 3 + \angle 4 = 180$$

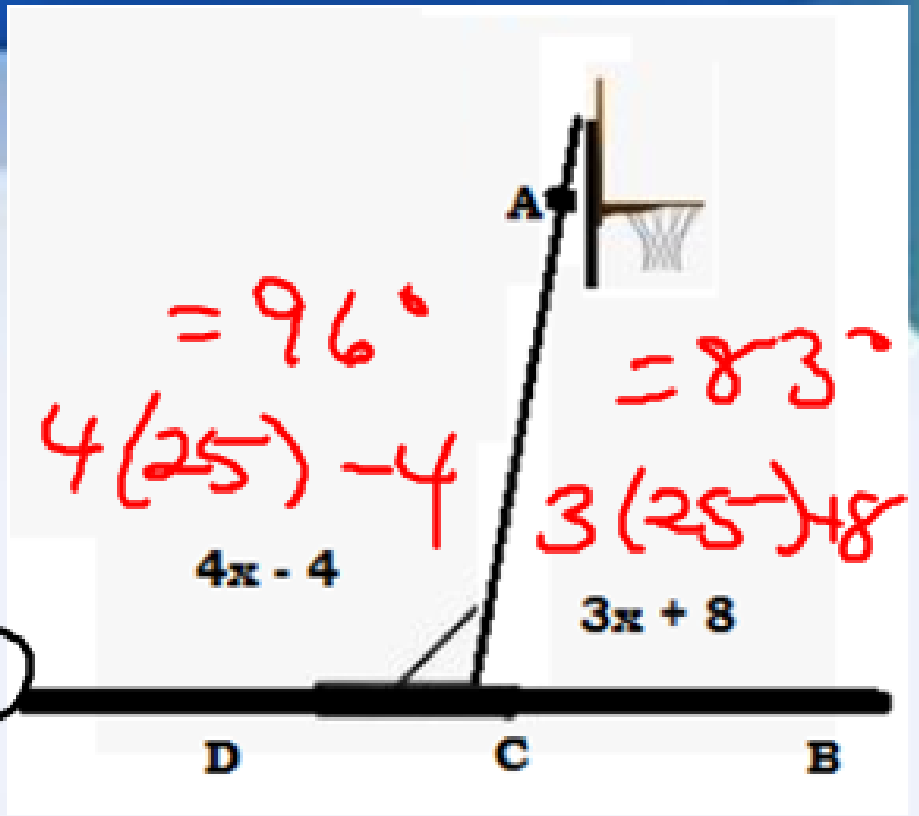
$$\angle 3 + 41 = 180$$

$$-41 \qquad -41$$

$$\angle 3 = 139$$

Example 2

The Basketball Pole forms a pair of supplementary angles with the ground. Find m∠BCA and m∠DCA.



$3x+8+4x-4=180$

$7x+4=180$

$-4 \quad -4$

$\frac{7x}{7} = \frac{176}{7}$

$x = 25$ ....

$= 96°$

$4(25)-4$

$= 83°$

$3(25)+8$

In the diagram, you can assume a line that looks straight is straight.

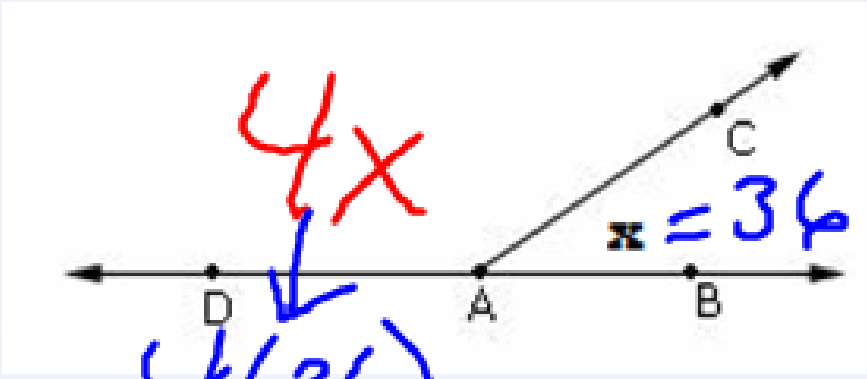
Example 3

Two angles form a linear pair. The measure of one angle is 4 times the measure of the other. Find the measure of each angle.

$4x + x = 180$

$5x = 180$

$\boxed{x = 36}$



$4(36)$

$= 144$

✓

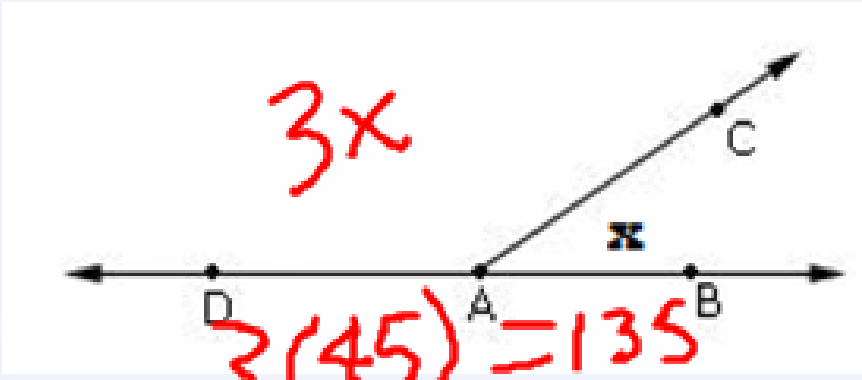
Example 4

Two angles form a linear pair. The measure of one angle is 3 times the measure of the other. Find the measure of each angle.

$3x + x = 180$

$\frac{4x}{4} = \frac{180}{4}$

$x = 45$



$3(45) = 135$

Homework Assignment

pg.19
#8, 9, 12, 13, 17, 18