HW January 6, 2014 Complementary, Supplementary, Linear Pairs, Straight Angles
HW after GGB LAB applet on Defining characteristics of these angles.
$C B$ entries on the definitions and diagrams for each of the four angles.

|  | $1 \quad \overrightarrow{B A}$ and $\overrightarrow{B C}$ are OPPOSITE RAYS ... These rays share a common point $B$ and points $A, B$, and $C$ are COLINEAR, that is all three points lie on the same line. <br> a) Draw \& label a picture of these opposite rays. <br> b) What name is given to $\angle A B C$ ? |
| :---: | :---: |
|  | $2 \angle K P X \& \angle A P X$ form a LINEAR PAIR. <br> a) Draw \& label a picture of these angles. <br> b) What is another name given to these two angles? |
|  | c) What is the measure of $\angle K P X$ if $m \angle A P X=70^{\circ}$ |
|  | d) Write and solve an equation to determine the measure of each angle, if $m \angle K P X$ is 12 more than $m \angle A P X$. (ATQ) |
|  | e) Write and solve an equation to determine the measure of each angle, if $m \angle K P X$ is 5 less than 4 times $m \angle A P X$, determine the measure of each angle. (ATQ) |
|  | $3 \quad M K$ lies in the interio |
|  | a) Draw \& labe |
|  |  |
|  | c) If $m \angle K M L=25^{\circ}$, what is the mea $\angle J M K$ |
|  | d) Write and solve an equation to determine the measure of each angle, if $m \angle J M K$ is 18 more than $m \angle K M L$. (ATQ) |
|  | e) Write and solve an equation to determine the measure of each angle, if $m \angle J M K$ is 14 less than 3 times $m \angle K M L$, determine the measure of each angle. (ATQ) |

$2 \angle K P X \& \angle A P X$ form a LINEAR PAIR.
f) Draw \& label a picture of these angles.
g) What is another name given to these two angles?
h) What is the measure of $\angle K P X$ if $m \angle A P X=70^{\circ}$
i) Write and solve an equation to determine the measure of each angle, if $m \angle K P X$ is 12 more than $m \angle A P X$. (ATQ)
j) Write and solve an equation to determine the measure of each angle, if $m \angle K P X$ is 5 less than 4 times $m \angle A P X$, determine the measure of each angle. (ATQ)
$3 \overrightarrow{M K}$ lies in the interior of angle $\angle J M L$ and $\overrightarrow{M J} \perp \overrightarrow{M L}$.
f) Draw \& label a picture of these angles.
g) What is the name given to $\angle J M K \& \angle K M L$
h) If $m \angle K M L=25^{\circ}$, what is the measure of $\angle J M K$
i) Write and solve an equation to determine the measure of each angle, if $m \angle J M K$ is 18 more than $m \angle K M L$. (ATQ)
j) Write and solve an equation to determine the measure of each angle, if $m \angle J M K$ is 14 less than 3 times $m \angle K M L$, determine the measure of each angle. (ATQ)

| Complementary <br> Angles | Supplementary <br> Angles | Linear Pair <br> Angles | Straight <br> Angle |
| :---: | :---: | :---: | :---: |
|  |  |  |  |

