

Go Over Quiz...

Name: _____

Geometry Quiz 1.1 – 1.3

Period: _____

Label each point, line, line segment, or ray with its correct name.

1.



ray XY

2.



segment DE

3.



point S

4.



line WX

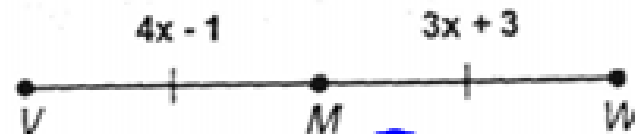
5. Solve for x . Show your work!



$$\begin{array}{r} 25 = x + 12 \\ -12 \quad -12 \\ \hline \end{array}$$

$$\boxed{x = 13}$$

6. Find MW. Show your work.



$$\begin{array}{r} 4x - 1 = 3 + 3 \\ -3x \quad -3x \\ \hline 1x - 1 = 6 \\ +1 \quad +1 \\ \hline x = 4 \end{array}$$

$$\begin{array}{r} 3x + 3 \\ 3(4) + 3 \\ \hline 15 \end{array}$$

Go Over Quiz...

For the following, use the formulas below.

Mid-point Formula

$$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

Distance Formula

$$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

7. The endpoints of \overline{ST} are $S(-3, 2)$ and $T(5, 8)$. Find the coordinates of the midpoint of \overline{ST} . Then find ST .

$$\frac{-3 + 5}{2}, \frac{2 + 8}{2}$$

$$\frac{2}{2}, \frac{10}{2}$$
$$(1, 5)$$

$$\sqrt{(5 - (-3))^2 + (8 - 2)^2}$$

$$\sqrt{(8)^2 + (6)^2}$$

$$\sqrt{64 + 36}$$

$$\sqrt{100}$$

$$\sqrt{25} \cdot \sqrt{4} = 10$$

CHAPTER 1 TEST MONDAY

ANYONE HAVE ANYTHING TO HAND IT?

Section 1.4

Measure & Classify Angles

Homework Assignment

Pg. 29

**#6-10,
22, 23, 25, 26**

An angle consists of 2 different rays with the same endpoint.
The rays are the sides of the angle.
The endpoint is the vertex of the angle

Name:

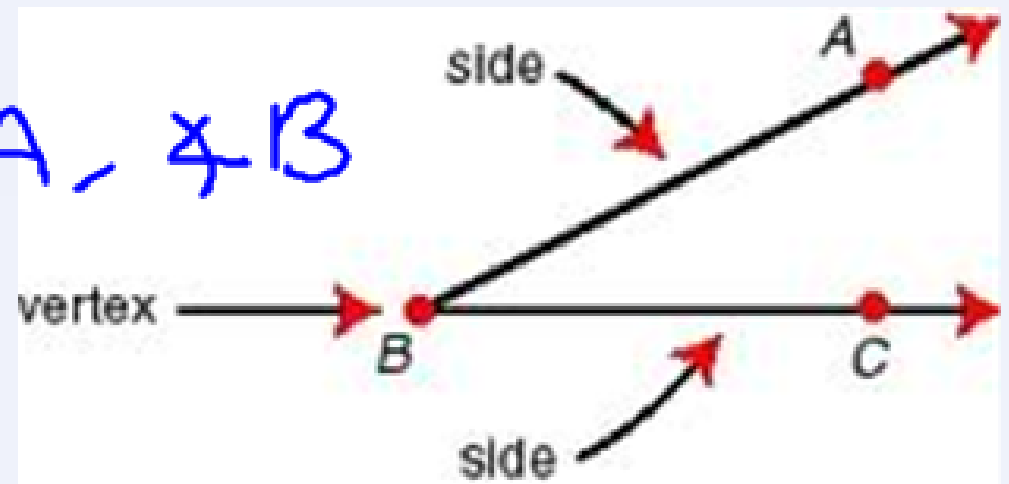
$\angle ABC$, $\angle CBA$, $\angle B$

Sides:

\overrightarrow{BA} , \overrightarrow{BC}

Vertex:

B

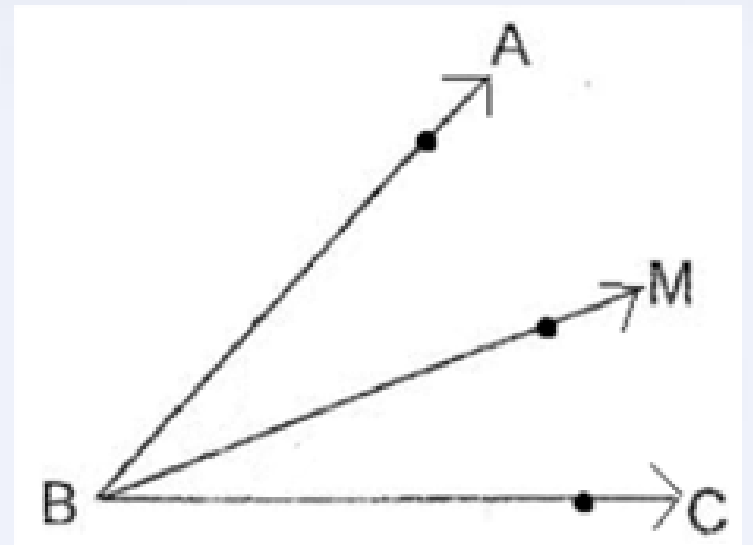


Name the 3 angles in the diagram.

$\angle ABM$

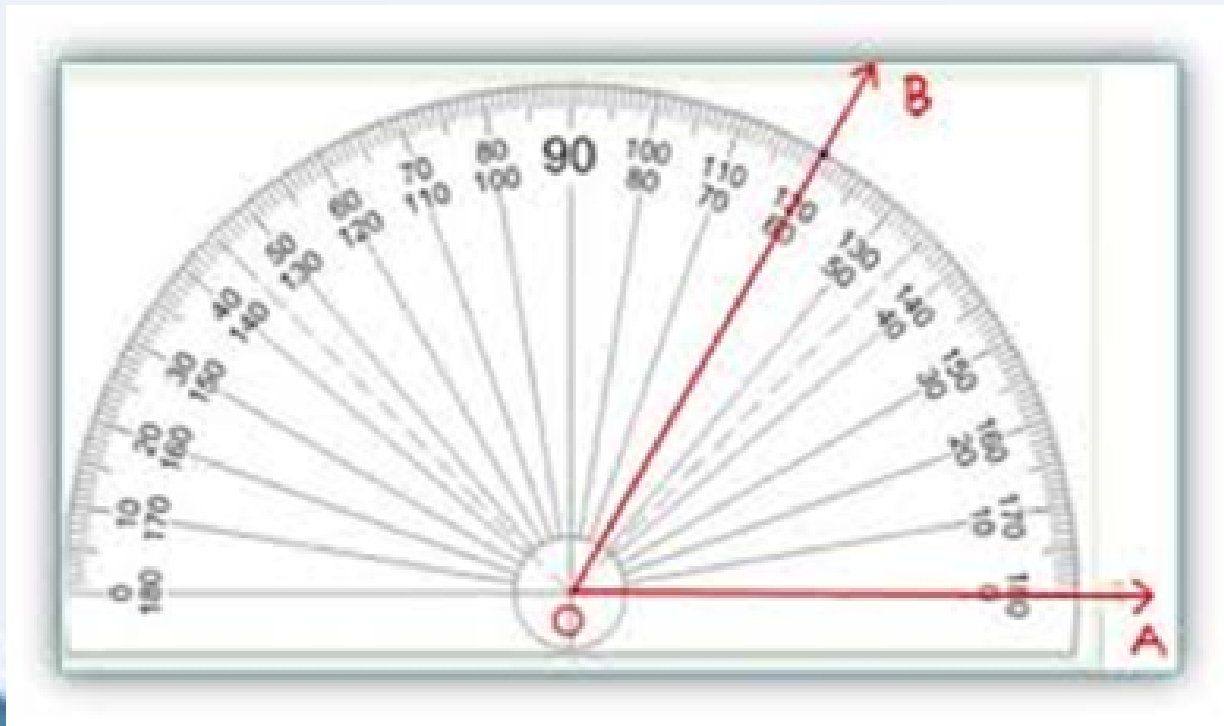
$\angle MBC$

$\angle ABC$



Protractor Postulate:

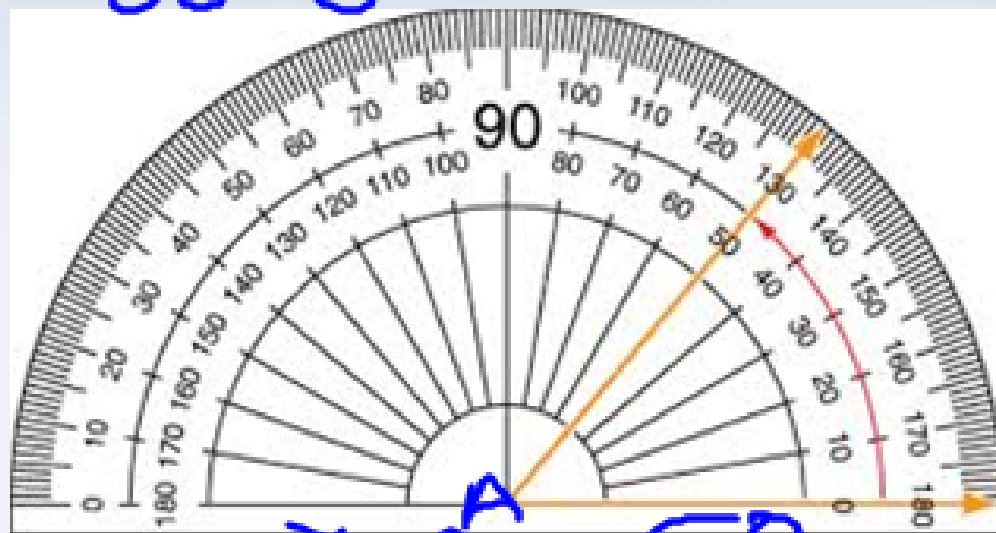
Consider \overleftrightarrow{OB} and a point A on one side of \overleftrightarrow{OB} .
The rays of the form \overrightarrow{OA} can be matched one to one with
the real numbers from 0 to 180.



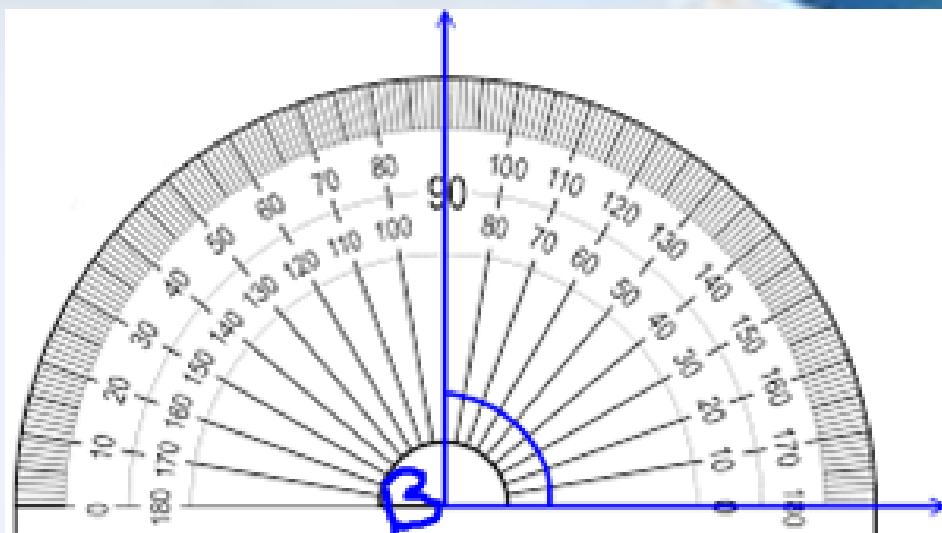
$$\begin{aligned} & B - A \\ & 60 - 0 \\ & m\angle AOB \\ & = 60^\circ \end{aligned}$$

Reading a Protractor:

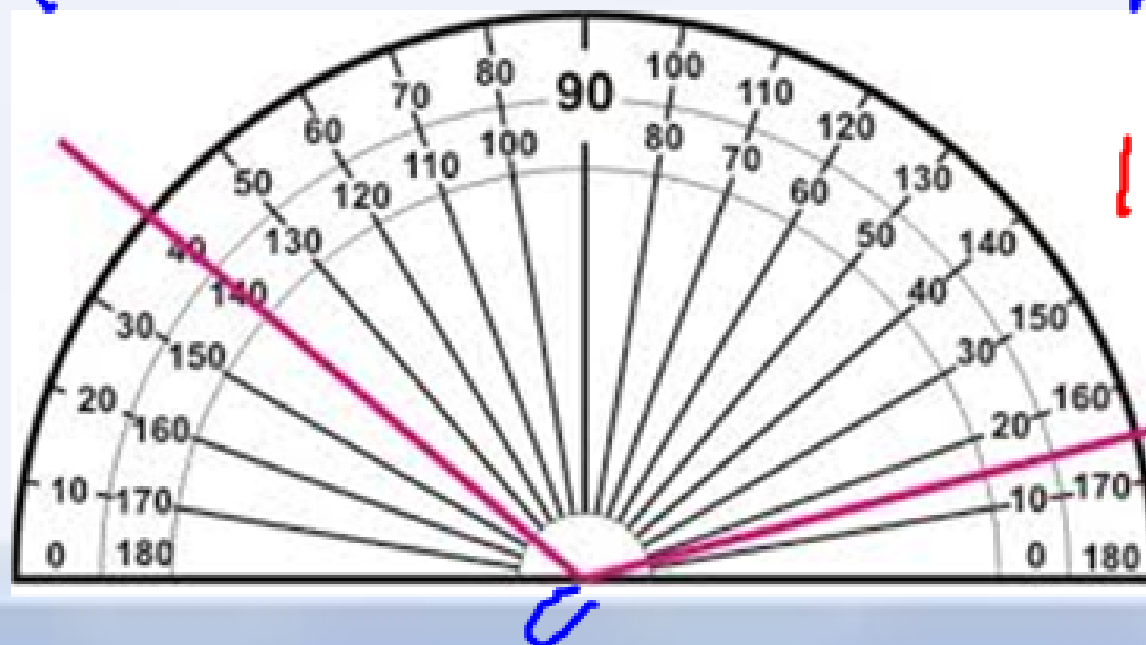
50-0



$m\angle A = 50$



$m\angle B = 90$



$140 - 15 = 125$

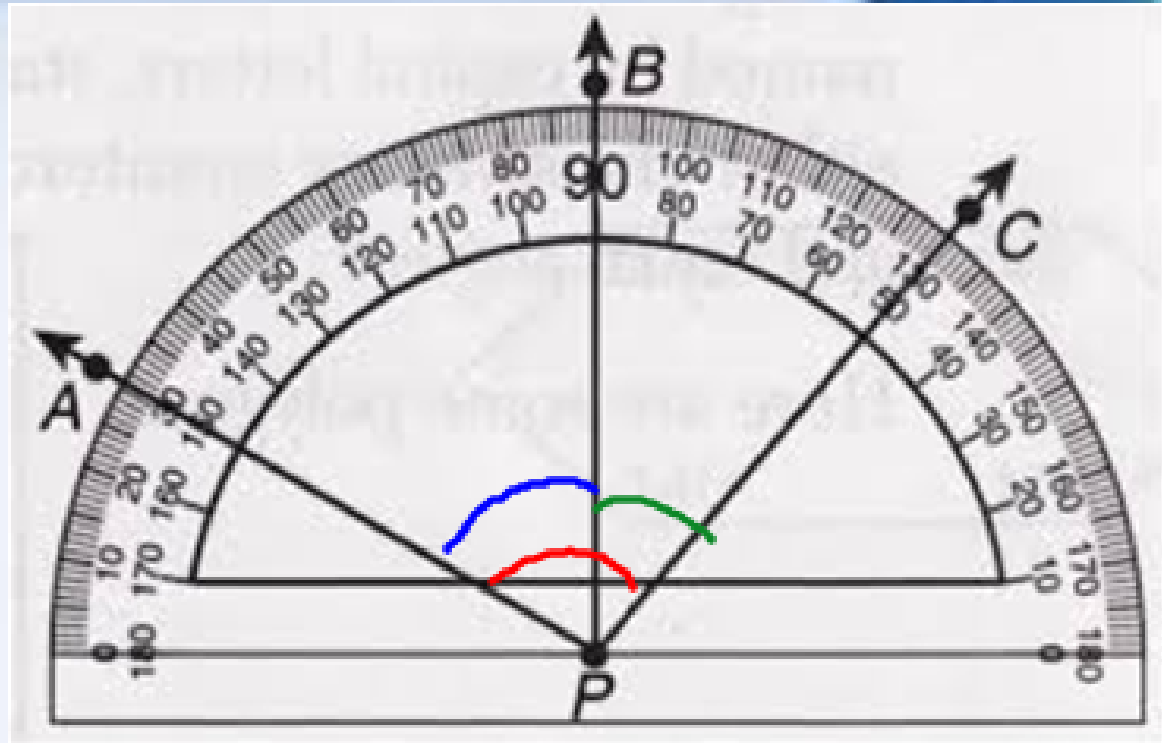
$m\angle C = 125$

Name the 3 different Angles and their measures.

$$\angle APC = 100^\circ$$

$$\angle APB = 60^\circ$$

$$\angle BPC = 40^\circ$$

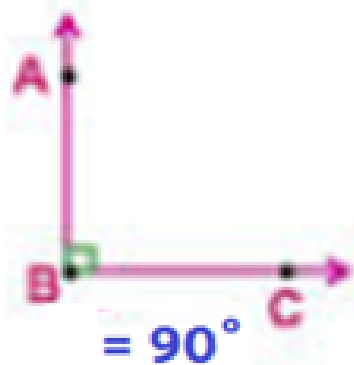




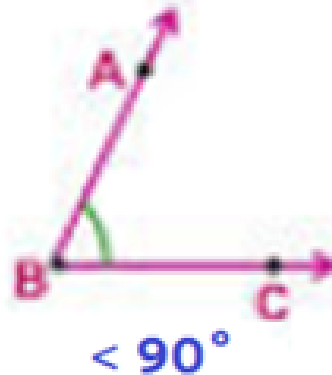
Types of Angles

There are 4 main types of angles.

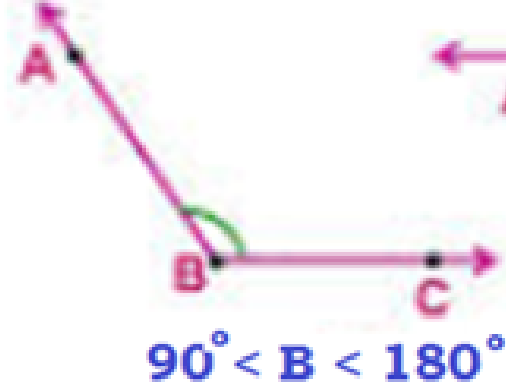
Right Angle



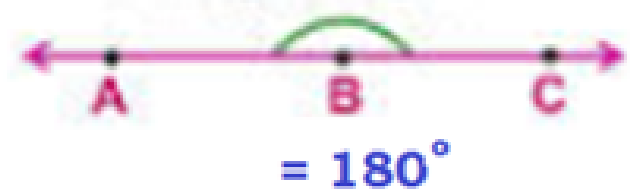
Acute Angle



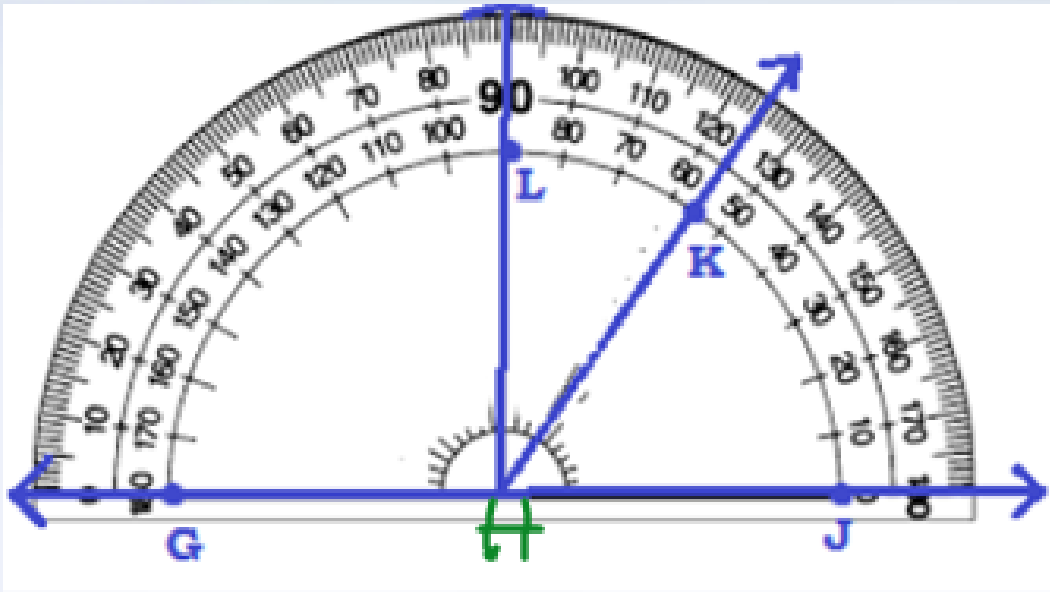
Obtuse Angle



Straight Angle



Try On Your Own...



Use the diagram to find the measure of the indicated angles. Then classify the angles as Acute, Right, Obtuse, or Straight.

a. $\angle KHJ$
acute.
 55°

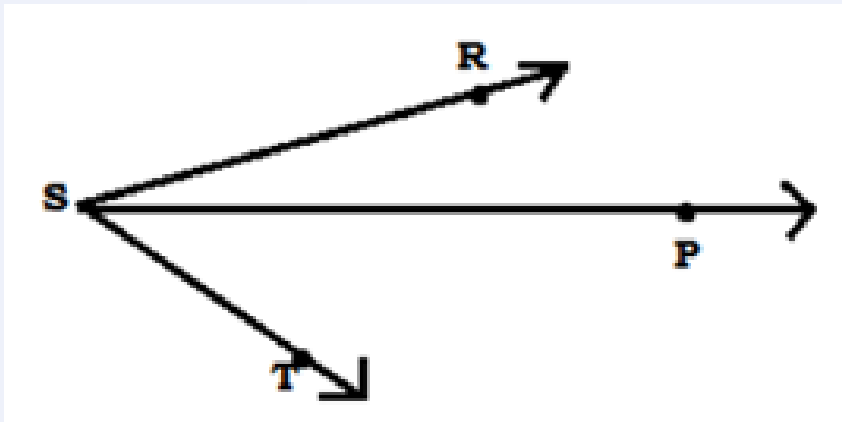
b. $\angle GHK$
obtuse.
 125°

c. $\angle GHJ$
straight
 180°

d. $\angle GHK$
right.
 90°

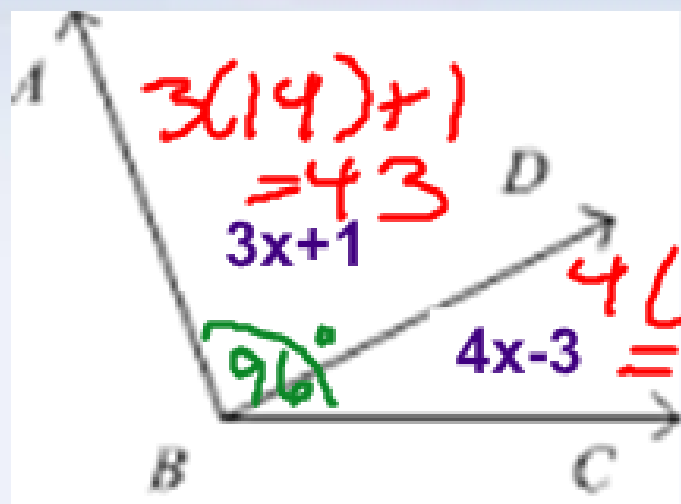
Angle Addition Postulate:

If P is the interior of $\angle RST$, then the measure of $\angle RST$ is equal to the sum of the measures of $\angle RSP$ and $\angle PST$



$$m\angle RST = m\angle RSP + m\angle PST$$

Example...



If the measure of angle ABC is 96 degrees.
Find the measure of the two individual angles.

$$\angle ABD + \angle DBC = \angle ABC$$

$$m\angle ABC = 96^\circ$$

$$m\angle DBC = 53^\circ$$

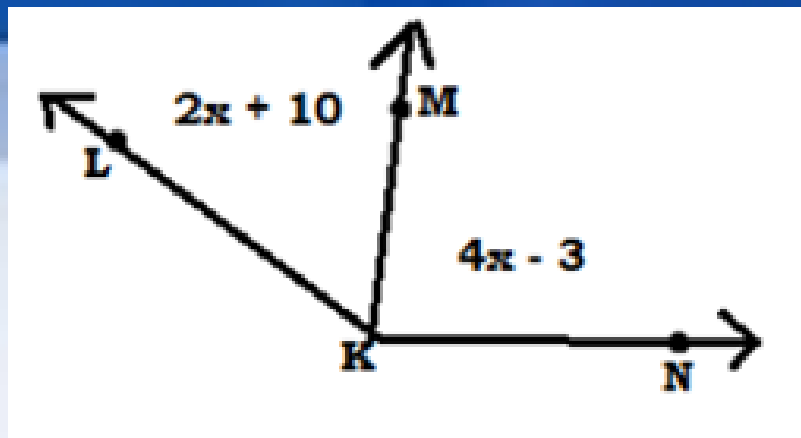
$$3x + 1 + 4x - 3 = 96^\circ$$

$$7x - 2 = 96^\circ$$

$$\begin{array}{r} 7x - 2 = 96^\circ \\ + 2 \quad + 2 \\ \hline 7x = 98^\circ \\ \div 7 \quad \div 7 \\ \hline x = 14 \end{array}$$

$$x = 14$$

Example...



If the measure of angle LKN is 145 degrees.
Find the measure of the two individual angles.

$$145 = (2x + 10) + (4x - 3)$$

$$145 = 6x + 7$$

$$138 = 6x$$

$$x = 23$$

$$m\angle LKM = 56$$

$$m\angle MKN = 89$$

Homework Assignment

Now Do Pg. 29

**#6-10,
22, 23, 25, 26**

