Name: Key

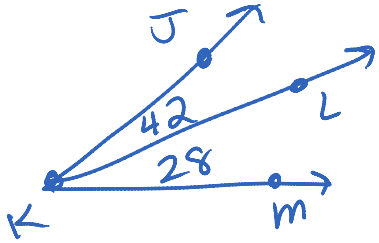
Section 1.3
Homework

1. Angle A is an acute angle, Angle O is an obtuse angle, and Angle R is a right angle. Order the angles from least to greatest.

$\angle A, \angle R, \angle O$

2. L is in the interior of Angle JKM. Find each of the following.

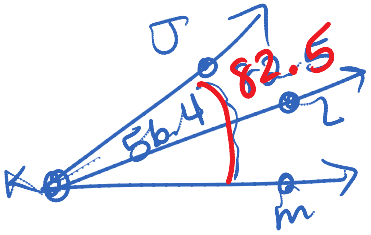
$m\angle JKM$ if $m\angle JKL = 42°$ and $m\angle LKM = 28°$



$\angle JKL + \angle LKM = \angle JKM$
$42 + 28 = \angle JKM$
$70 = \angle JKM$

3. L is in the interior of Angle JKM. Find each of the following.

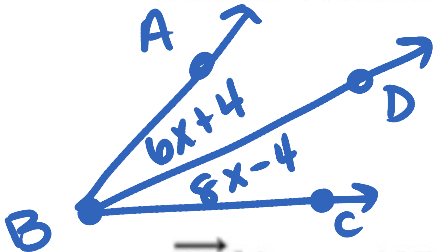
$m\angle LKM$ if $m\angle JKL = 56.4°$ and $m\angle JKM = 82.5°$



$82.5 - 56.4 = 26.1°$

4. $\overrightarrow{BD}$ bisects $\angle ABC$. Find each of the following.

$m\angle ABD$ if $m\angle ABD = (6x + 4)°$ and $m\angle DBC = (8x - 4)°$

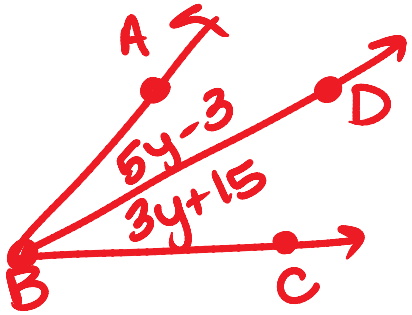


$6x + 4 = 8x - 4$
$\frac{8}{2} = \frac{2x}{2}$
$4 = x$

$\angle ABD = 6(4) + 4$
$= 24 + 4$
$28°$

5. $\overrightarrow{BD}$ bisects $\angle ABC$. Find each of the following.

$m\angle ABC$ if $m\angle ABD = (5y - 3)°$ and $m\angle DBC = (3y + 15)°$



$5y - 3 = 3y + 15$
$2y = 18$
$y = 9$

$\angle ABD = 5(9) - 3$
$= 42$

$\angle ABC = 42 + 42$
$= 84°$