

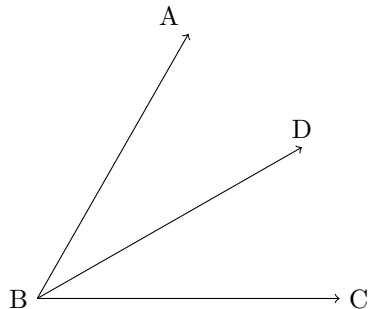
Geometry Worksheet June 29, 2016

(1) $\angle P$ is an acute angle, $\angle S$ is a straight angle, $\angle Q$ is an obtuse angle, and $\angle R$ is a right angle. Put $\angle P$, $\angle S$, $\angle Q$, and $\angle R$ in order from least to greatest by measure.

(2) L is in the interior of $\angle JKM$. Find $m\angle JKM$ if $m\angle JKL = 42^\circ$ and $m\angle LKM = 28^\circ$.

(3) T is in the interior of $\angle RSU$. Find $m\angle RST$ if $m\angle TSU = 46.7^\circ$ and $m\angle RSU = 83.5^\circ$.

(4) Given the figure below answer the following:



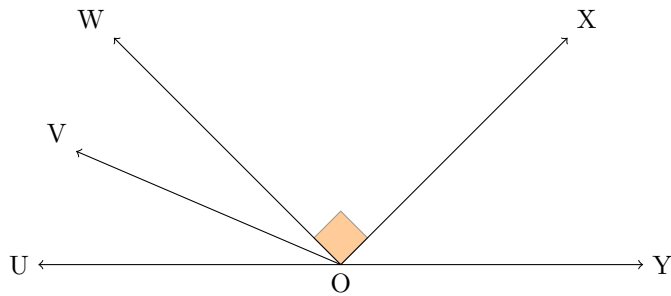
a. Suppose \overrightarrow{BD} bisects $\angle ABC$. What can we say about $m\angle ABD$ and $m\angle DBC$?

b. Let $m\angle ABD = (6x + 4)^\circ$ and $m\angle DBC = (8x - 4)^\circ$. Find x ?

c. Write an equation that describes the relationship of $m\angle ABC$ with $m\angle ABD$ and $m\angle DBC$.

d. Find $m\angle ABC$.

(5) In the figure below $m\angle UOW = 50^\circ$ and \overrightarrow{OV} bisects $\angle UOW$. What is $m\angle VOY$?



- a. 25°
- b. 65°
- c. 130°
- d. 155°