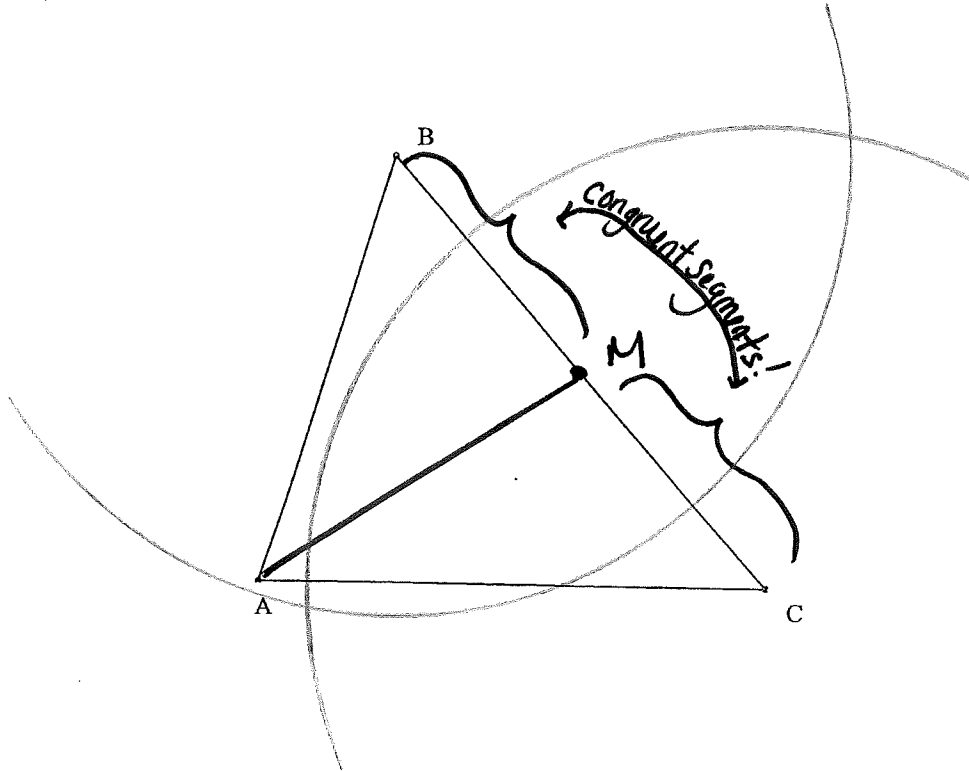


Name: Key Date: _____ Hour: _____

Medians Constructing a Median

Median- A segment which starts at the vertex of a triangle and goes through the midpoint of the side opposite that vertex.

Given the triangle below, follow Construction 2 on pg. 267 to construct the median to segment BC. Explain how you did the construction IN YOUR OWN WORDS below the triangle. Complete the geometry statement below.

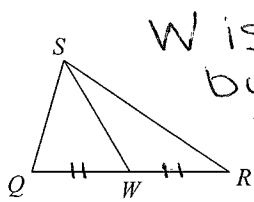


****If AM is the median, then _____ \cong MC.****

Median Examples

Each figure shows a triangle with one or more of its medians.

1) Find x if $WR = 6x$ and $WQ = 5x + 2$ Find WR



W is midpt of QR
by def of median

$WR \cong WQ$ def of median

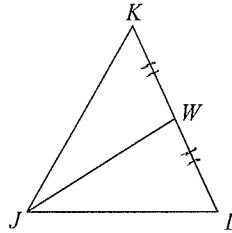
$6x = 5x + 2$

$x = 2$

$WR = 5(2) + 2$

$WR = 12$

2) Find x if $WK = 6x - 1$ and $WL = 5x$



$WK \cong WL$ def of median

$6x - 1 = 5x$

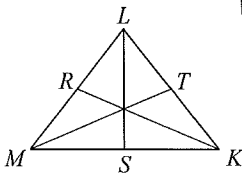
$-1 = -x$

$1 = x$

3) Find x if $SK = 2x - 4$ and $SM = x$

Then find

MK .



$SK \cong SM$ def of median

$2x - 4 = x$

$-4 = -x$

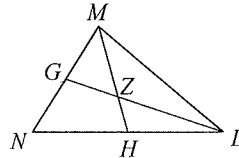
$4 = x$

$MK = MS + SK$

$MK = 4 + 2(4) - 4$

$MK = 8$ units

4) Find x if $GN = \frac{2}{5}x - \frac{9}{5}$ and $GM = \frac{1}{5}x - \frac{1}{5}$



$GN \cong GM$ def of median

$5\left(\frac{2}{5}x - \frac{9}{5}\right) = \left(\frac{1}{5}x - \frac{1}{5}\right) \times 5$

$2x - 9 = 1x - 1$

$x = 8$