Wednesday, November 7, 2012

Agenda:

- TISK & MM
- Lesson 5-4: Midsegments
- Homework: 5-4 Worksheet

TISK Problems

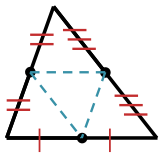
1) Simplify: $\frac{6}{\sqrt{14}}$

2)Simplify: $-(4x-6)^2$

We will have 2 Mental Math Questions today.

§5.4 Midsegment Theorem

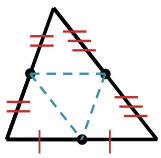
Def.: A segment is a midsegment of a triangle if and only if it connects two midpoints of sides of the triangle.



Midsegments

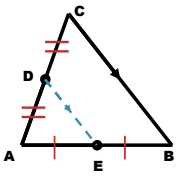
Midsegment Theorem

- What are some things we might be able to prove about midsegments?



Midsegment Theorem

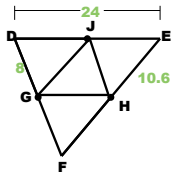
The segment connecting the midpoints of two sides of a triangle is parallel to the third side and half as long.



$\overline{DE} \parallel \overline{CB}$

$DE = \frac{1}{2}CB$

$\overline{GH}, \overline{HJ}$, and $\overline{JG}$ are midsegments of ΔDEF



a) $\overline{JH} \parallel$ **?**
b) $\overline{DE} \parallel$ **?**
c) $EF =$ **?**
d) $GH =$ **?**
e) $DF =$ **?**
f) $JH =$ **?**
g) Perimeter of $\Delta GHJ =$ **?**

Verify that $\overline{AB}$ is the midsegment of ΔQRO.