

## Triangle Midsegment Investigation

1. Sketch  $\triangle ABC$  on the graph paper:  $A(-5, -2)$ ,  $B(3, -4)$ ,  $C(1, 6)$
2. Draw segment  $DE$ , the midsegment of  $\triangle ABC$ .  
 $D(-2, 2)$ ,  $E(2, 1)$
3. Find the length of segment  $AB$  and segment  $DE$ . Compare them. What do you notice?
4. What do line  $DE$  and line  $AB$  have in common?
5. Into what ratio does point  $D$  divide segment  $AC$ ? What does this mean about point  $D$ ?
6. Into what ratio does point  $E$  divide segment  $BC$ ? What does this mean about point  $E$ ?
7. Summarize the properties of the triangle midsegment.
8. Use your findings to solve the triangle midsegment problems (# around the room)