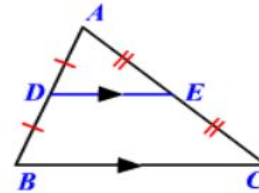


Midsegment:

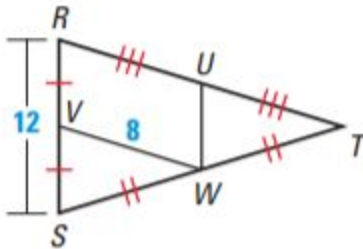
### Midsegment Theorem

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

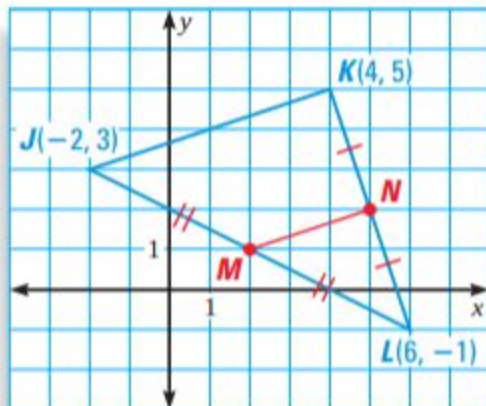
$$\overline{DE} \parallel \overline{BC} \text{ and } DE = \frac{1}{2}BC$$



- $UW$  and  $VW$  are midsegments of  $\triangle RST$ . Find  $UW$  and  $RT$ .



- Use the coordinate plane below for the following questions
  - Find the coordinate of the midpoint on  $\overline{JK}$ .
  - What is the slope of the midsegment  $\overline{MN}$ ? Is it the same as the slope of  $\overline{JK}$ ?



3.  $\overline{GH}$ ,  $\overline{HJ}$ ,  $\overline{JG}$  are midsegments of  $\triangle DEF$ . Find the following:

a.  $\overline{JH} \parallel$  \_\_\_\_\_

e.  $GH =$  \_\_\_\_\_

b.  $EF =$  \_\_\_\_\_

f.  $JH =$  \_\_\_\_\_

c.  $DF =$  \_\_\_\_\_

g. Find the perimeter of

d. \_\_\_\_\_  $\parallel \overline{DE}$

$\triangle GHJ$

