$\qquad$

The Midsegment of a Triangle is a $\qquad$ that connects the
$\qquad$ of the $\qquad$ of the triangle.


D and E are $\qquad$ .
$\overline{D E}$ is a $\qquad$ .

Every triangle has $\qquad$ midsegments!


## Midsegment Theorem

The segment connecting the midpoints of two sides of a triangle is —_ to the $\qquad$ side and is $\qquad$ as long as that side.

Example 1: In the diagram, $\overline{S T}$ and $\overline{T U}$ are midsegments of the triangle $\triangle P Q R$. Find $\overline{P R}$ and $\overline{T U}$.

$\qquad$

Example 2: In the diagram, $\overline{X Y}$ and $\overline{Z Y}$ are midsegments of the triangle $\Delta L M N$. Find $\overline{M N}$ and $\overline{Z Y}$.


Example 3: In the diagram, $\overline{E D}$ and $\overline{D F}$ are midsegments of the triangle $\triangle A B C$.
Find $x, \overline{D F}$, and $\overline{A B}$.


## Identifying Parallel Segments

What are the three pairs of parallel segments in triangle $\triangle D E F$ ?


