Name: $\qquad$ Date: $\qquad$

## Mid Segment of a Triangle

A midsegment of a triangle is a segment that connects the $\qquad$ of two sides of a triangle.

A mid segment of a triangle is $\qquad$ to one side of the triangle.

A mid segment of a triangle is $\qquad$ the length of the $\qquad$
$\qquad$ .

$$
\text { MIDSEGMENT }=\frac{\text { Parallel Side }}{2}
$$

The three mid segments of a triangle divides the larger triangle into $\qquad$

Making Connections Let's look at the three triangles below.


1. If $M X=3^{Y}$, then $M N=$

2. If $N O=8$, then $Y O=$
3. Label all the lengths we can know on all three triangles from the information above.
4. Look at the relationship between $\triangle M X Z$ and $\triangle M N O$. What does this remind you of?
5. 


3.


2.

4.


## Triangle Proportionality

***YOU MUST BE CONSISTENT WITH HOW YOU SET UP YOUR PROPORTIONS***
Label your triangles (big/small or new/old)

Examples: For each of the following, solve for $x$.


