

5.1 - Triangle Midsegment Exploration

1. Using the “Polygon Tool”, construct triangle ABC.
2. Construct the midpoint of AB, name point D. Then construct the midpoint of BC, name point E.
3. Construct segment DE.

\overline{DE} is a MIDSEGMENT, which is the segment between the midpoints of two sides of a triangle.

Part I –

1. Measure the length of \overline{DE} . Measure the length of \overline{AC} .

DE = _____ AC = _____

2. Drag point A or point C to change your triangle and record the new measurements.

DE = _____ AC = _____

DE = _____ AC = _____

3. Compare your results. Make a conjecture...

The length of a midsegment is _____

Part II –

1. Calculate the slopes of \overline{DE} and \overline{AC} .

Need Help???

Slope is on the "Angle" drop-down menu.

1) Select "Slope".

2) Select the line (or segment) for which you would like to find the slope

Slope of DE = _____ Slope of AC = _____

2. Drag point A or point C to change your triangle and observe the new slope values. Think...

What do you notice? What does this mean?

3. Make a conjecture...

The midsegment _____
