Objective: In this lesson, you will prove theorems about triangles.

Interior Angles of Triangles

Triangle Sum Theorem

Use the Triangle Sum Theorem to find $\gamma_2$.

$38.48 + 99.16 + \gamma_2 = 180$

$\gamma_2 = 180 - 38.48 - 99.16 = \underline{\phantom{0}}$

Base Angles of Isosceles Triangles

Isosceles triangle

Base Angles Theorem

Angle bisector

Use the Triangle Sum Theorem to find $\gamma_2$.
Connecting Triangle Midpoints

Midsegment - _______________________________________________________________________

Line segment DE is a midsegment that connects the midpoint of line segment AB to the midpoint of line segment BC.

Triangle Midsegment Theorem — _______________________________________________________________________

______________________________________________________________________________________

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Concurrent Triangle Medians

Medians - ______________________________________________________________________________

Line segment $AD$ is a median connecting $A$ to the midpoint of line segment $BC$.

Concurrent - ______________________________________________________________________________

Concurrent Triangle Medians Theorem – ______________________________________________________________________________

In $\triangle ABC$, medians $AD$, $BE$, and $CF$ intersect at a common point.
**Summary**

In this lesson, we discussed several theorems regarding triangles:

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