# Def. Triangle

## A 3-sided polygon

## The symbol for triangle is Δ

To name a Δ,
use the symbol for Δ followed by the 3 vertices.

# Classifying Δ's by angles

Acute Δ - All 3 ∠'s of the Δ are acute ∠'s

Obtuse Δ - Exactly 1 ∠ of the Δ is obtuse,
the other 2 ∠'s are acute.

Right Δ - Exactly 1 ∠ of the Δ is right,
the other 2 ∠'s are acute.

Equiangular Δ - An acute Δ where all the ∠'s are ≅.

# Classifying Δ's by sides

Scalene Δ - A Δ where the 3 side lengths are all different measurments.

Isosceles Δ - A Δ where at least 2 side lengths are the same measurment.

Equilateral Δ - A Δ where all 3 side lengths are the same measurment.

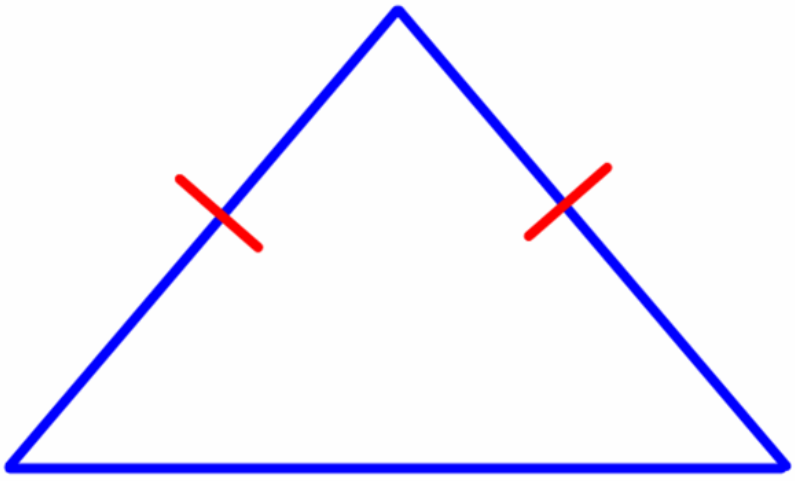
# Names of the parts of an Isosceles Δ

(match the words with the part)

vertex

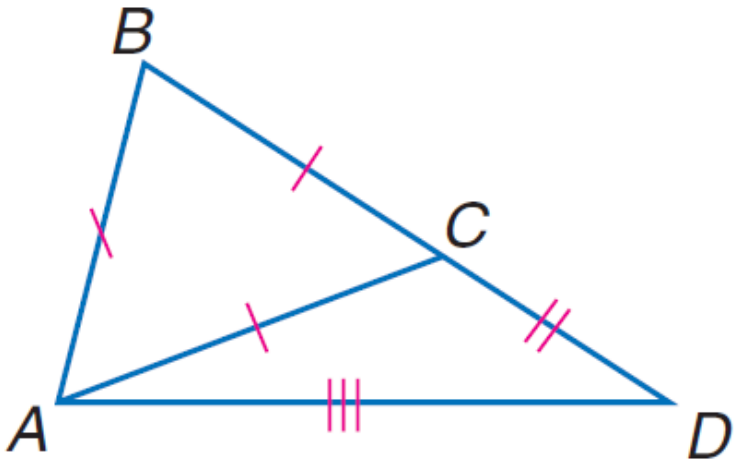
base

legs

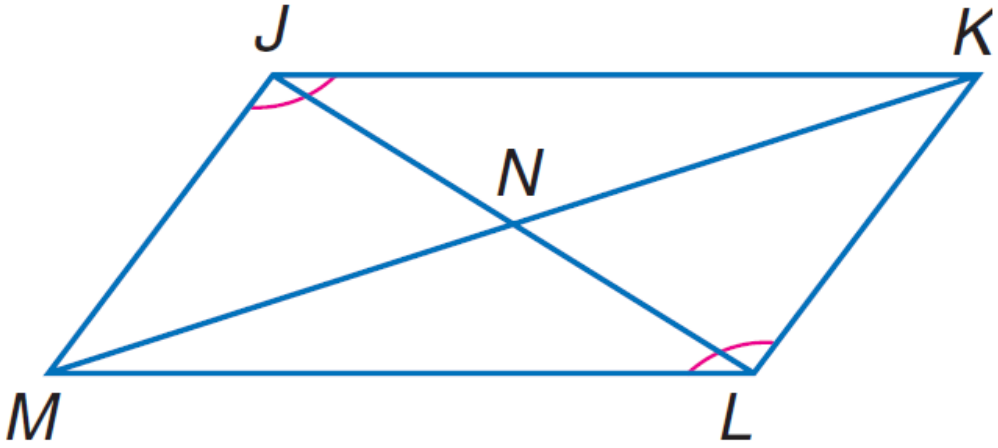


Name the equilateral triangle: _____

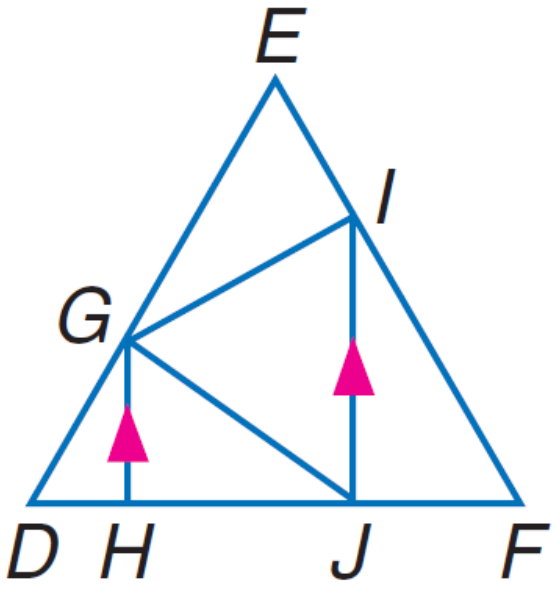
Name the non-equilateral isosceles triangle: _____



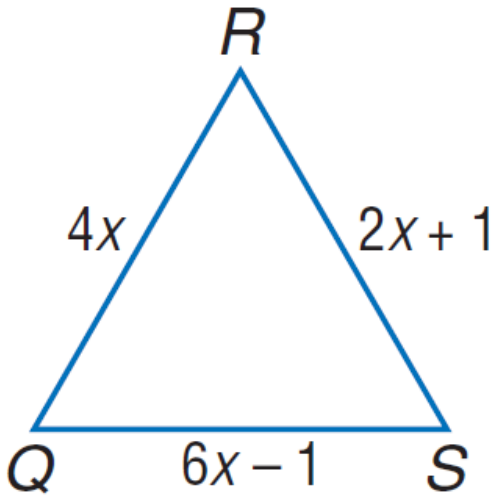

Identify the obtuse triangles if $\angle MJK \cong \angle KLM$, $m\angle MJK = 126$, and $m\angle JNM = 52$.



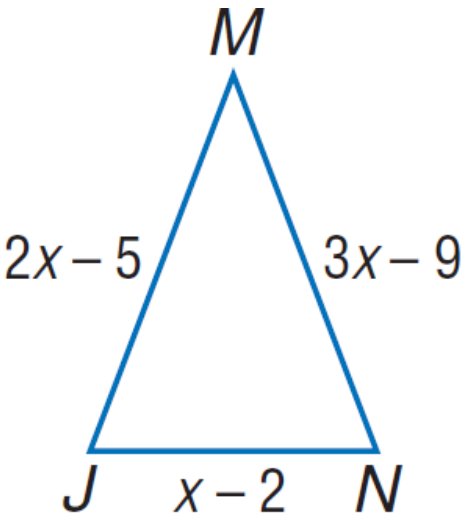
Identify the right triangles if $\overline{IJ} \parallel \overline{GH}$, $\overline{GH} \perp \overline{DF}$, and $\overline{GI} \perp \overline{EF}$.




**ALGEBRA** Find $x$, $QR$, $RS$, and $QS$ if $\triangle QRS$ is an equilateral triangle.



**ALGEBRA** Find $x$, $JM$, $MN$, and $JN$ if $\triangle JMN$ is an isosceles triangle with $\overline{JM} \cong \overline{MN}$.




. **PROOF** Write a two-column proof to prove that $\triangle EQL$ is equiangular.