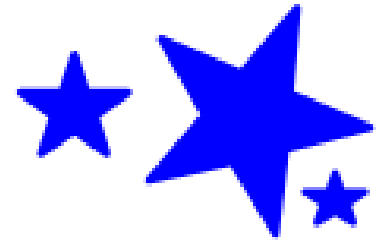# 4 - 6
Isosceles Triangles
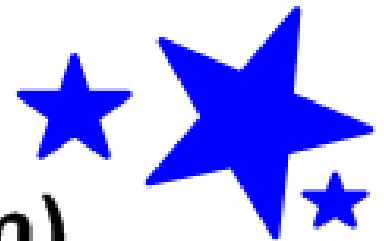
vertex angle: angle formed by the 2 $\cong$ sides
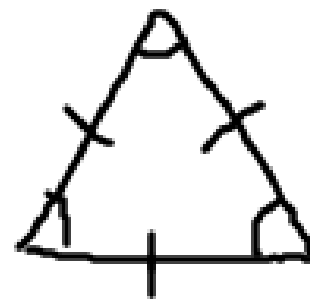
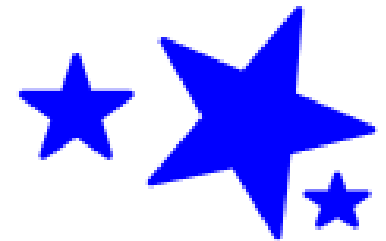**base angles:** the other two

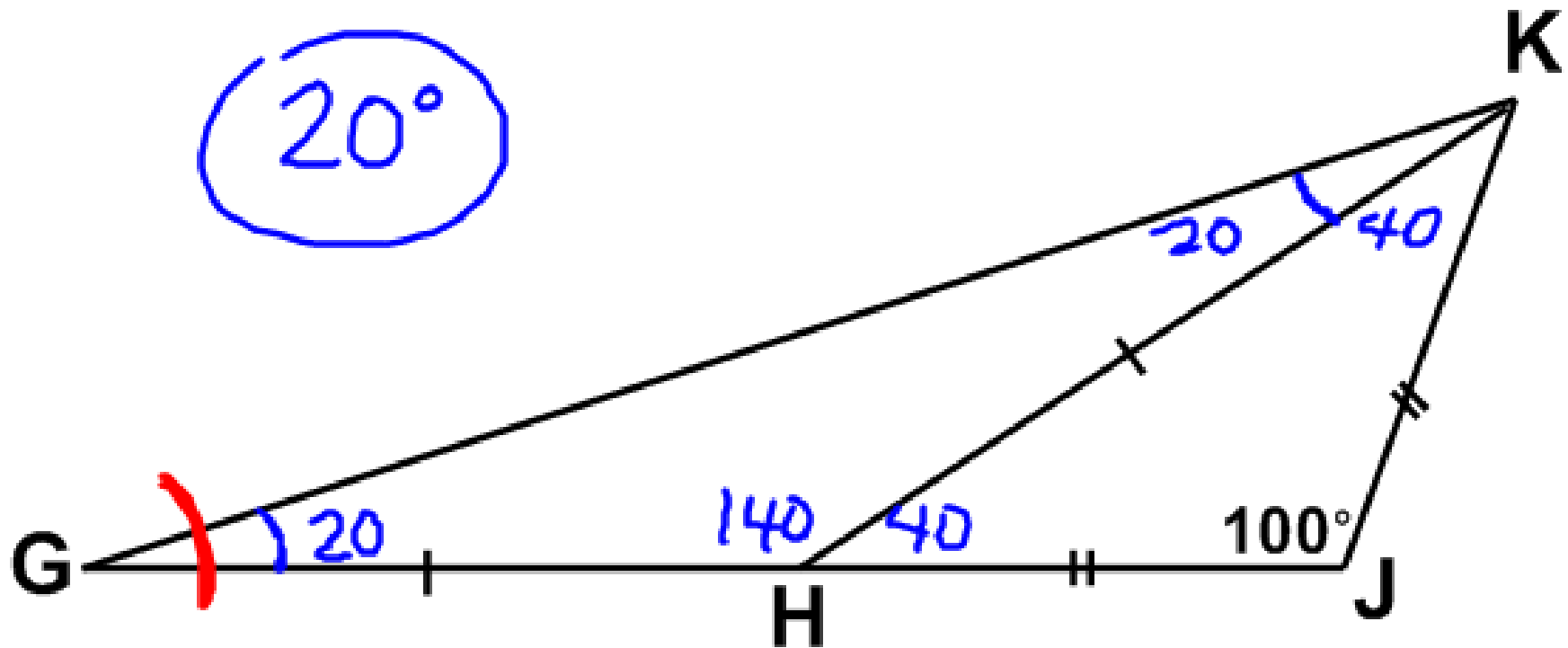# Theorem 4.9
(Isosceles Triangle Theorem)

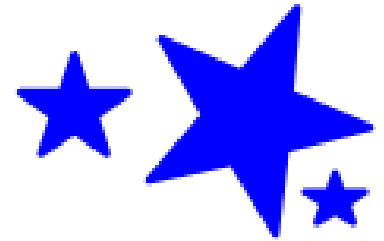If two sides of a $\triangle$ are $\cong$, then the $\angle$s opposite those sides are $\cong$.

Ex: If $\overline{GH} \cong \overline{HK}$, $\overline{HJ} \cong \overline{JK}$, and m∠GJK = 100°, what is the measure of ∠HGK?
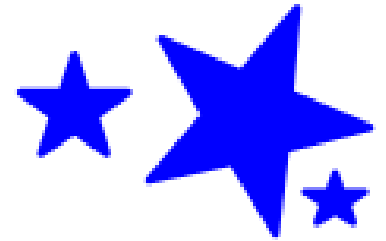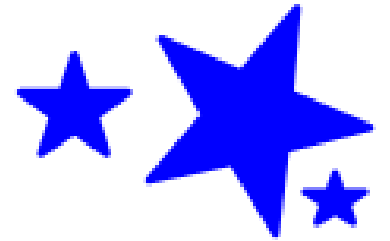
20°

Theorem 4.10

converse of Theorem 4.9

Corollaries

4.3 equilateral ⟷ equiangular

4.4 equilateral, each $\angle = 60°$

Homework:

4 - 6 WS