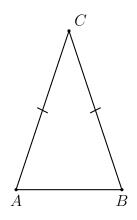
Name:

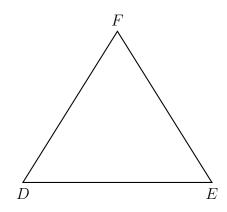
2.7 Homework: Isosceles base theorem

Diagrams are not necessarily drawn to scale unless otherwise stated.

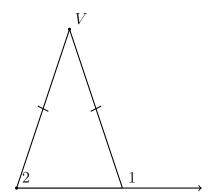
1. Given $\triangle ABC$. $\overline{AC} \cong \overline{BC}$, $m \angle A = 55$. Find $m \angle C$.



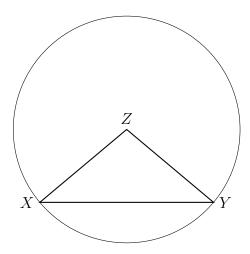
2. Given $\triangle DEF$. $\overline{DF} \cong \overline{EF}$, $m \angle F = 72$. Find $m \angle D$.



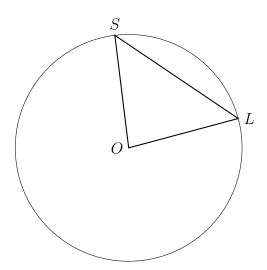
3. Given the triangle shown with congruent sides marked. $m\angle 1=110$. Find $m\angle 2$ Spicy: Find the measure of the vertex angle.



4. Given circle Z with inscribed $\triangle XYZ$. $m\angle Z=100$. Find $m\angle Y$.



5. Given circle O with inscribed $\triangle SLO$. $m \angle S = x + 7$. Find $m \angle O = 2x - 2$. Find x. For full credit, check your answer.



6. Writing to learn: Why do we write down the theorems that justify each step to solve a problem?