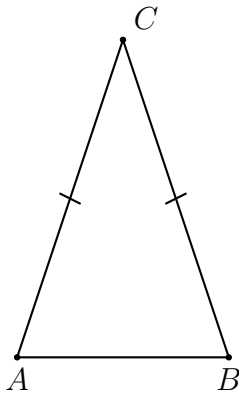


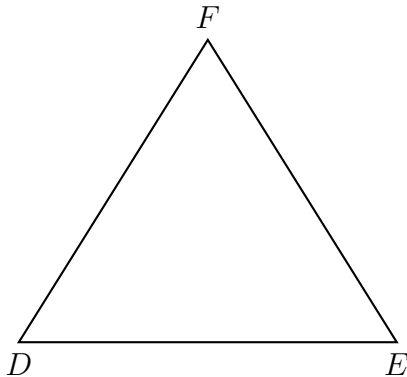
Classwork assessment: Isosceles base theorem

Show each step, justify each by writing the name of a theorem to the right.

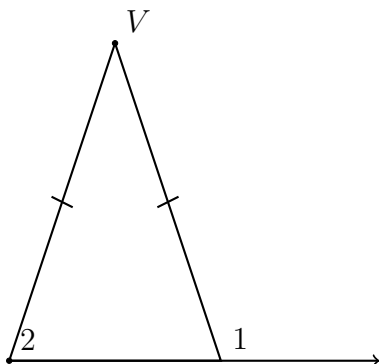
1. Given $\triangle ABC$. $\overline{AC} \cong \overline{BC}$, $m\angle A = 55$. Find $m\angle C$.



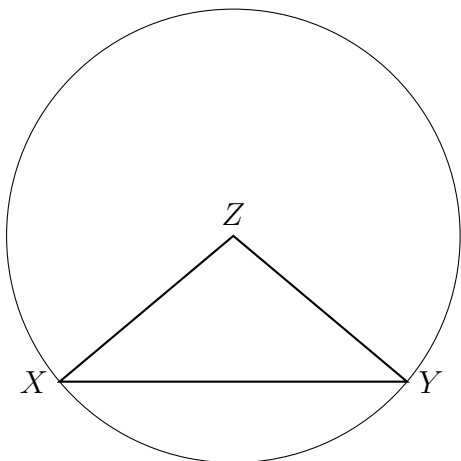
2. Given $\triangle DEF$. $\overline{DF} \cong \overline{EF}$, $m\angle F = 72$. Find $m\angle D$.



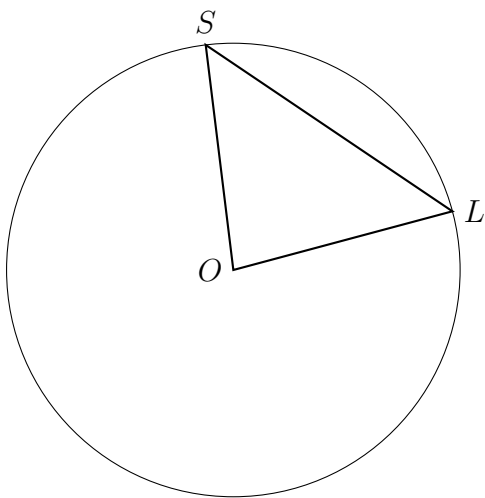
3. Given the triangle shown with congruent sides marked. $m\angle 1 = 110$. Find $m\angle 2$
Spicy: Find the measure of the vertex angle.



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?