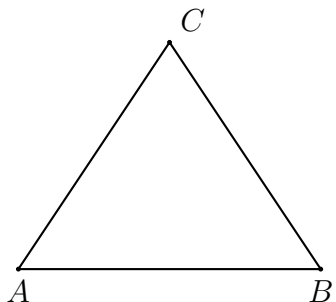
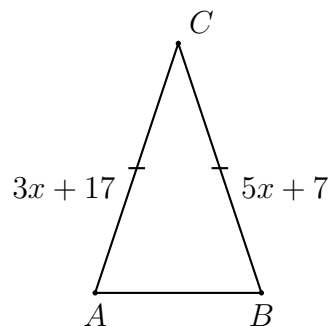


### 5.8 Classwork: Isosceles triangles

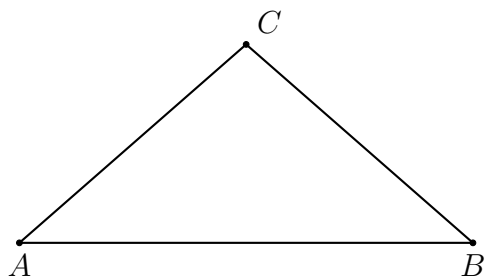
1. Given isosceles  $\triangle ABC$  with  $\overline{AC} \cong \overline{BC}$ . On the diagram mark the congruent line segments with tick marks.



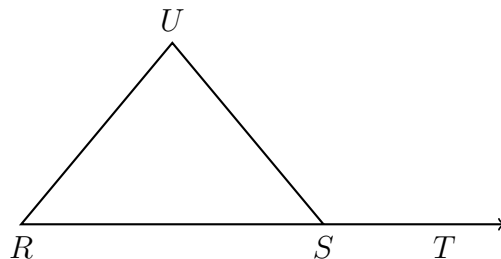
2. Given  $\triangle ABC$  with  $\overline{AC} \cong \overline{BC}$ .  $AC = 5x + 7$  and  $BC = 3x + 17$ . Find  $AC$ .



3. Given isosceles  $\triangle ABC$  with  $\overline{AC} \cong \overline{BC}$ ,  $m\angle A = 12x$ , and  $m\angle B = 42$ . Find  $x$ . Find  $m\angle C$ .



4. Given isosceles  $\triangle RSU$  with  $\overline{UR} \cong \overline{US}$ . If  $m\angle UST = 130$  find  $m\angle U$ .



5. Given parallel lines  $\overleftrightarrow{AB} \parallel \overleftrightarrow{CDE}$  with  $\overline{AC} \cong \overline{AD}$ . If  $m\angle BAD = 70$  find  $m\angle ACD$ .

