

## 3.7-8 Types of Triangles

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### 1 Angle Side Theorem

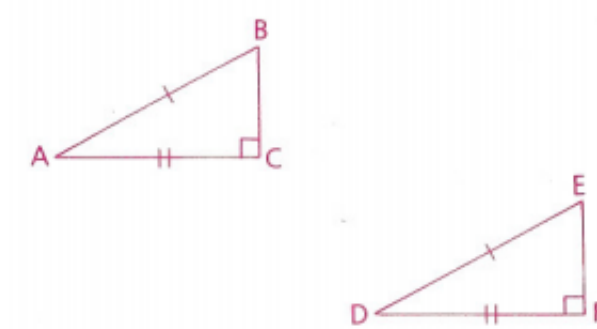
**Theorem 20** *If two sides of a triangle are congruent, the angles opposite the sides are congruent. (If  $\triangle$ , then  $\triangle$ .)*

**Theorem 21** *If two angles of a triangle are congruent, the sides opposite the angles are congruent. (If  $\triangle$ , then  $\triangle$ .)*

**Theorem** *If two sides of a triangle are not congruent, then the angles opposite them are not congruent, and the larger angle is opposite the longer side. (If  $\triangle$ , then  $\triangle$ .)*

**Theorem** *If two angles of a triangle are not congruent, then the sides opposite them are not congruent, and the longer side is opposite the larger angle. (If  $\triangle$ , then  $\triangle$ .)*

### 2 Hypotenuse Leg (HL)



**POS:** If a correspondence exists between 2  $\triangle$ s where the hyp  $\cong$  and one leg of each is  $\cong \rightarrow \triangle \cong$