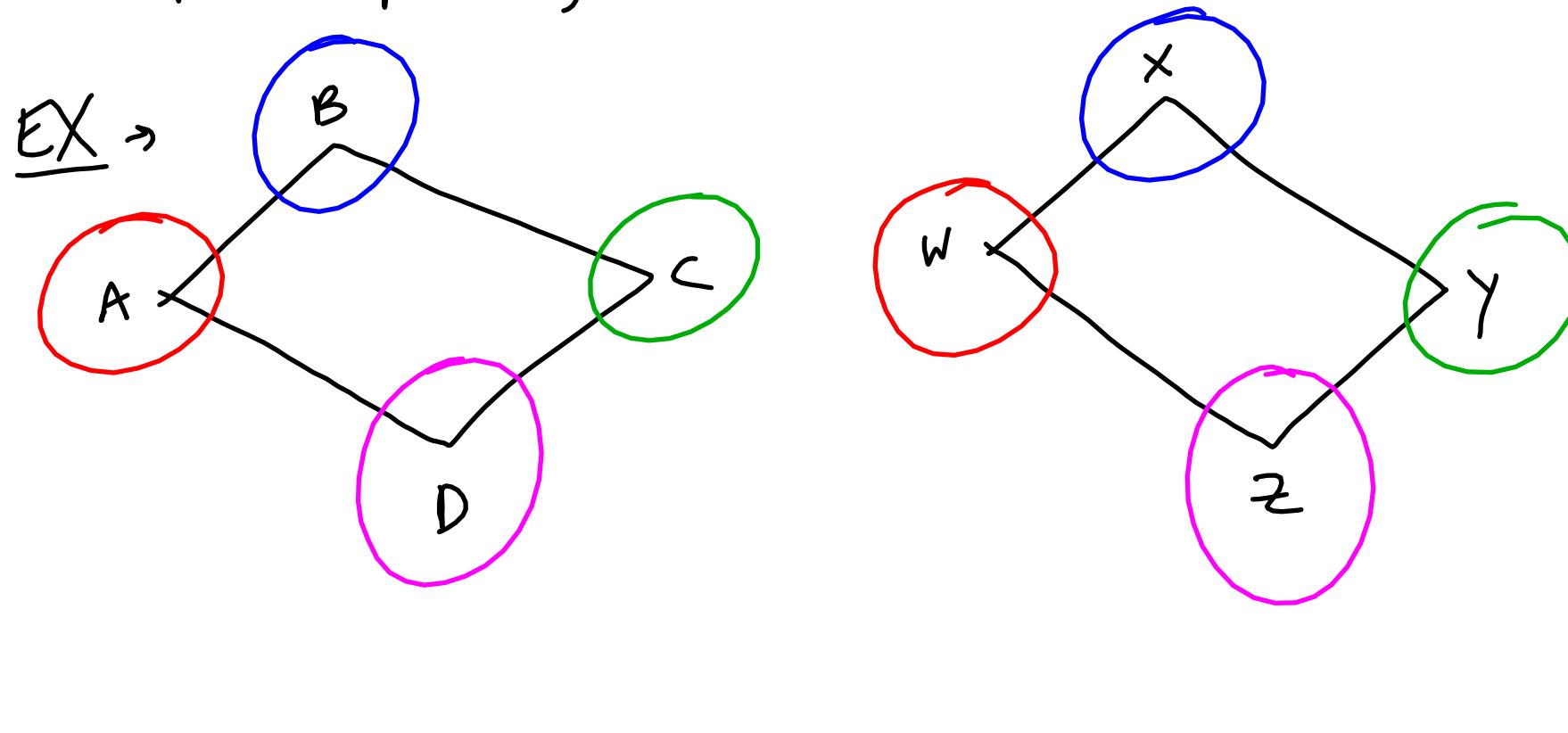


## Congruent Figures

- same size + shape
- if 2 figures are  $\cong$ , corresponding parts are  $\cong$ 
  - corresponding  $\angle$ 's are listed in same order



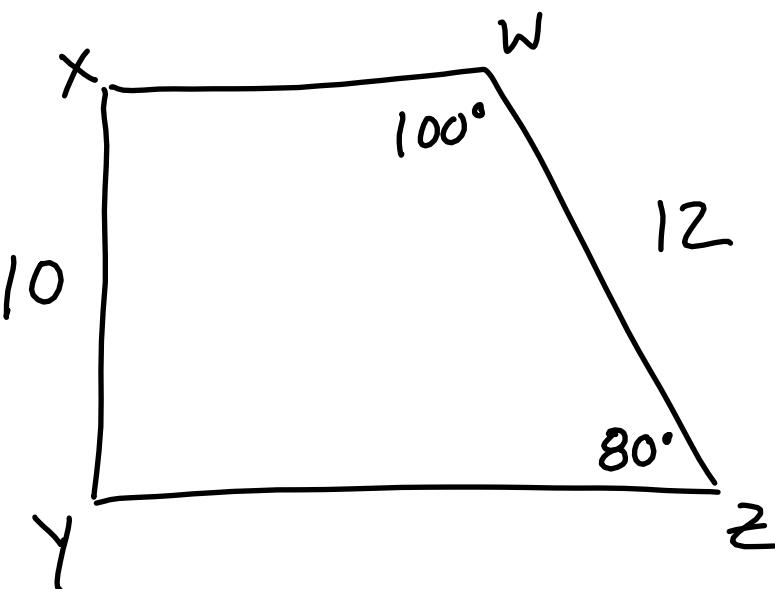
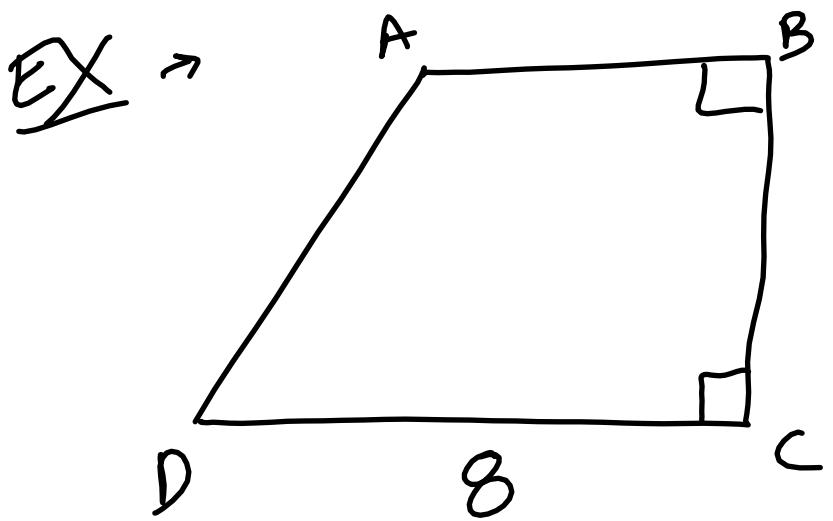
Corresponding sides  $\rightarrow$

$$\begin{aligned}\overline{AB} &\cong \overline{WX} \\ \overline{BC} &\cong \overline{XY} \\ \overline{CD} &\cong \overline{YZ} \\ \overline{DA} &\cong \overline{ZX}\end{aligned}$$

Corresponding

$$\begin{aligned}\angle A &\cong \angle W \\ \angle B &\cong \angle X \\ \angle C &\cong \angle Y \\ \angle D &\cong \angle Z\end{aligned}$$

$\angle$ 's  $\rightarrow$



$$\angle X = 90^\circ$$

$$\angle Y = 90^\circ$$

$$AD = 12$$

$$YZ = 8$$

$$\angle D = 80^\circ$$

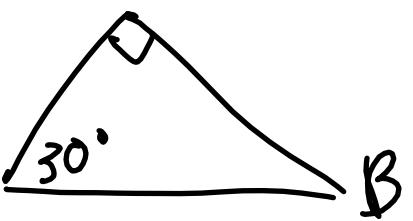
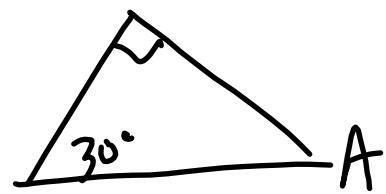
$$\angle A = 100^\circ$$

$$BC = 10$$

- 3rd  $\angle$ 's Thm.  $\Rightarrow$  If 2  $\angle$ 's in triangle are congruent to 2  $\angle$ 's in another triangle,  
then 3rd  $\angle$ 's are congruent

$$A + B ? \Rightarrow \angle A \cong \angle B$$

EX →



HW: p. 222 → 8-29, 40, 41