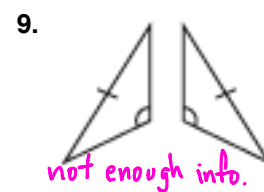
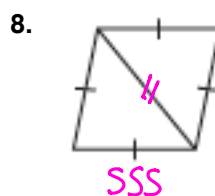
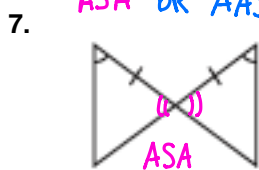
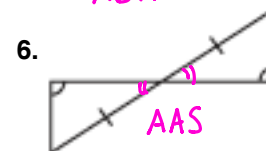
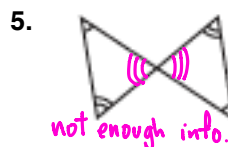
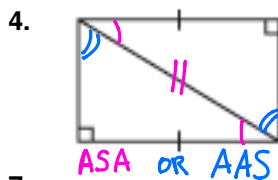
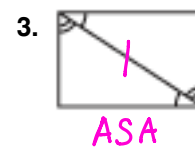
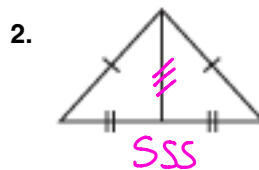
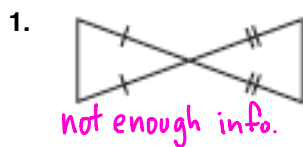


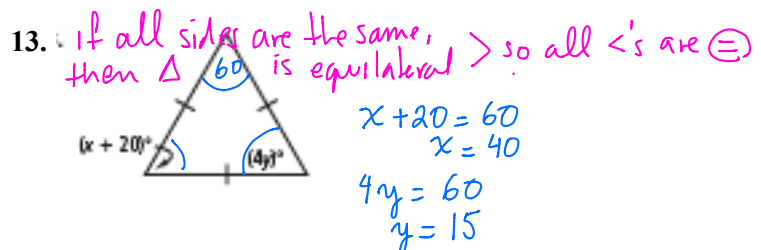
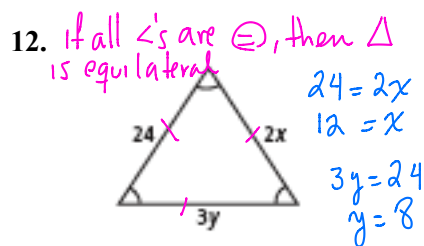
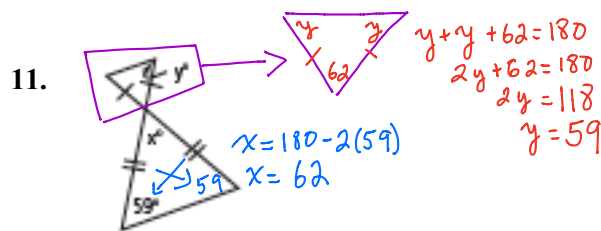
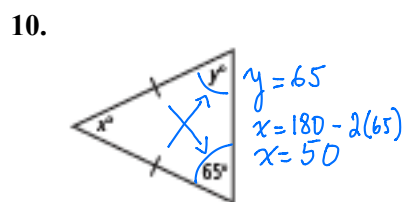
## Unit 4 Practice Test

### Do you know HOW?

State the postulate or theorem you would use to prove each pair of triangles congruent. If the triangles cannot be proven congruent, write *not enough information*.



Find the value of  $x$  and  $y$ .



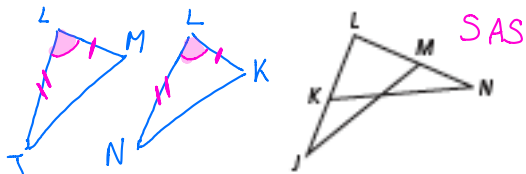
14.  $\triangle CGI \cong \triangle MPR$ . Name all of the pairs of corresponding congruent parts.

$$\begin{array}{ll} \angle C \cong \angle M & \overline{CG} \cong \overline{MP} \\ \angle G \cong \angle P & \overline{GI} \cong \overline{PR} \\ \angle I \cong \angle R & \overline{IC} \cong \overline{RM} \end{array}$$

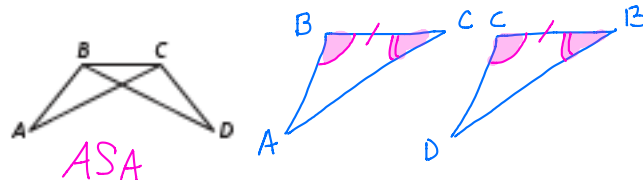
## Unit 4 Practice Test (continued)

Name a pair of overlapping congruent triangles in each diagram. State whether the triangles are congruent by SSS, SAS, ASA, AAS, ~~SSA~~.

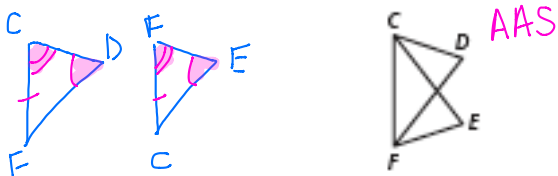
15. Given:  $\overline{LM} \cong \overline{LK}$ ;  $\overline{LN} \cong \overline{LJ}$



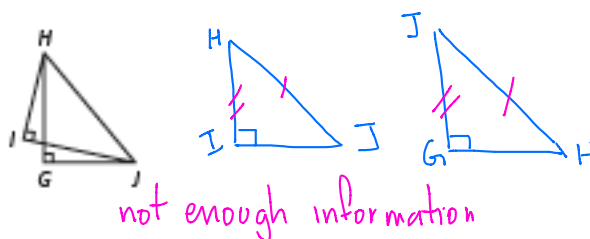
16. Given:  $\angle ABC \cong \angle DCB$ ;  $\angle DBC \cong \angle ACB$



17. Given:  $\angle E \cong \angle D \cong \angle DCF \cong \angle EFC$



18. Given:  $\overline{HI} \cong \overline{JG}$



Do you UNDERSTAND?

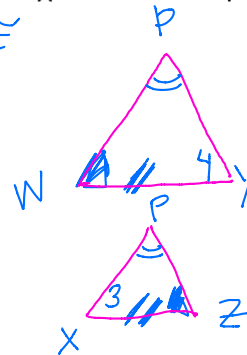
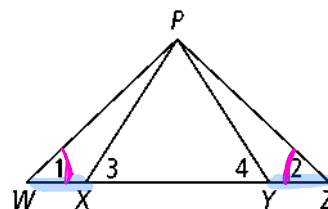
19. **Reasoning** Complete the following proof by providing the reason for each statement.

Given:  $\angle 1 \cong \angle 2$ ;  $\overline{WX} \cong \overline{ZY}$

Prove:  $\angle 3 \cong \angle 4$

- Statement**
- ①  $\angle 1 \cong \angle 2$ ,  $\overline{WX} \cong \overline{ZY}$
  - ②  $\angle WPY \cong \angle ZPX$
  - ③  $WX + XY = WY$   
 $ZY + YX = ZX$
  - ④  $ZY + XY = ZX$
  - ⑤  $WX = ZX$
  - ⑥  $\triangle WPY \cong \triangle ZPX$
  - ⑦  $\angle 3 \cong \angle 4$

- Reason**
- ① Given
  - ② symmetric prop.  $\cong$
  - ③ Segment add.
  - ④ Substitution
  - ⑤ substitution.
  - ⑥ AAS
  - ⑦ def of  $\cong \Delta$ 's



20. **Reasoning** Write a proof for the following:

Given:  $\overline{BD} \perp \overline{AC}$ , D is the midpoint of  $\overline{AC}$ .

Prove:  $\overline{BC} \cong \overline{BA}$

- | Statement   | Reason                     |
|---|----------------------------|
| ① $\overline{BD} \perp \overline{AC}$<br>D is midpoint of $\overline{AC}$ | ① Given                    |
| ② $\overline{DB} \cong \overline{DB}$                                     | ② Reflexive Prop $\cong$   |
| ③ $\triangle ADB \cong \triangle CDB$                                     | ③ SAS                      |
| ④ $\overline{BC} \cong \overline{BA}$                                     | ④ Def of $\cong \Delta$ 's |

