$\qquad$ _ $\qquad$ Date $\qquad$

### 5.7 Using Congruent Triangles CYU

## $\square$ Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake
HUse when you could do it alone with a little help from teacher or peer
$\boldsymbol{G}$ Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
$N$ Use when a question was not even attempted

| CONCEPTS | BASIC | INTERMEDIATE | ADVANCED |
| :--- | :---: | :---: | :---: |
| Reflexive POC | $1,2,3$ |  | 7 |
| CPCTC | $1-3$ | 10 | 6 |
| Alternate Interior Angles | 2 | 5 |  |
| Definition of Isosceles Triangle | 3 | 4,5 | 6,7 |
| ASA, AAS, SSS, HL, SAS | 9,10 | 4,5 | 6,7 |
| Definition of Vertical Angles | 10 | 5 | 6,7 |
| Area of Triangles |  |  | 8 |

Explain how to prove that the statement is true.

1. $\angle A \cong \angle D$

2. $\overline{A C} \cong \overline{D B}$

3. $\overline{G K} \cong \overline{H J}$


Write a plan to prove that angle one is congruent to angle two.
4.

5.


Use the information given in the diagram to write a two-column proof.
6. Prove $\overline{F L} \cong \overline{H N}$

7. Prove $\triangle P U X \cong \triangle Q S Y$

8. HOW DO YOU SEE IT? Use the tangram puzzle to answer the two questions.
a) Which triangle(s) have an area that is twice the area of the purple triangle?
b) How many times greater is the area of the orange triangle than the area of the purple triangle.

9. ATTENDING TO PRECISION Which triangles are congruent to $\triangle A B C$ ? Select all that apply.

10. MODELING WITH MATHEMATICS Explain how to find the distance across the canyon.


CYU Reflection: How far can you go: basic, intermediate, or advanced? Rate your mastery leve!!
How confident are you with the skills this CYU covered? Circle the score you would give yourself.


