Name $\qquad$ Date $\qquad$ Pd $\qquad$

## 8.1-8.3 DAY THREE CYU

$\square$ Use when you get it right all by yourself
$\boldsymbol{S}$ Use when you did it all by yourself, but made a silly mistake $\boldsymbol{H}$ Use 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 |
| :--- | :---: | :---: | :---: |
| Cross multiplication | 1 | 2 | 3 |
| Determining if polygons are similar | 4,12 | 5,13 | 6,14 |
| Determining scale factors | 7 | 8 |  |
| Using similarity to solve for $x$ | 9 | 10,15 | 11,16 |
| Stating the similarity postulate | 12 | 13 | 14 |
| Completing similarity statements | 12 | 13 | 14 |

8.1 Similar Polygons

## Solve the Proportions.

1. $\frac{m}{8}=\frac{m+7}{9}$
2. $\frac{n}{n+1}=\frac{3}{5}$
3. $\frac{8}{3}=\frac{v-9}{7 v+4}$

State if the polygons are similar.
4.

5.


21
6.



Find the scale factor of the smaller figure compared to the larger figure of the provided similar polygons.
7.


40


16
8.


15


Solve for $x$. The polygons in each pair are similar.
9.

10.


11.

scale factor from $A$ to $B=5: 6$

## 8.2 \& 8.3 Proving Triangles Similarity by AA~, SSS~, \& SAS~

State if the triangles are similar. If they are, state how you know they are similar and complete the similarity statement.

$\Delta U T S \sim$ $\qquad$
13.

$\triangle C B A \sim$ $\qquad$
14.

$\triangle J K L \sim$ $\qquad$

Solve for x . The triangles in each pair are similar.
15.

16.


CYU Reflection: How far can you go: basic, intermediate, or advanced?

## Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the


