

Name Key

Date _____ Pd _____

8.1 - 8.3 DAY THREE CYU

Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

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. $\frac{m}{8} = \frac{m+7}{9}$

$m = 56$

2. $\frac{n}{n+1} = \frac{3}{5}$

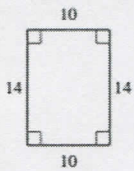
$n = \frac{3}{2}$

3. $\frac{8}{3} = \frac{v-9}{7v+4}$

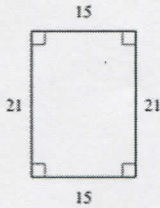
$v = \frac{-59}{53}$

State if the polygons are similar.

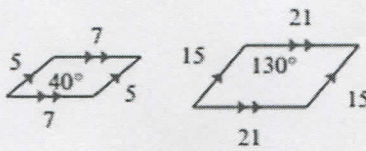
4.



yes ~
 $\frac{2}{3}$

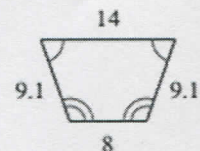


5.

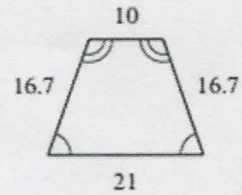


not AA ~
not ~

6.

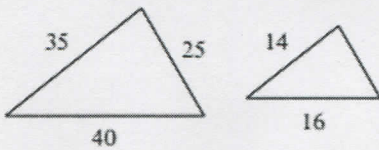


not ~



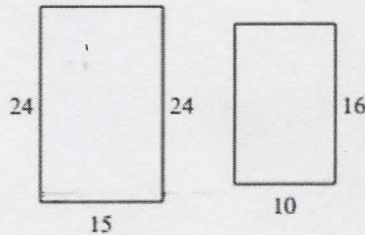
Find the scale factor of the smaller figure compared to the larger figure of the provided similar polygons.

7.



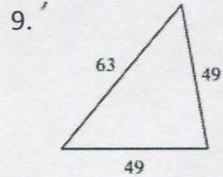
$\frac{2}{5}$ or 2:5

8.

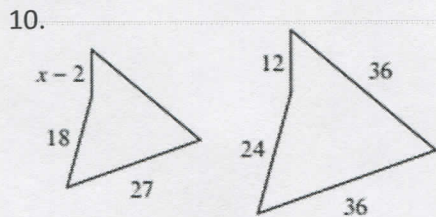


$\frac{2}{3}$ or 2:3

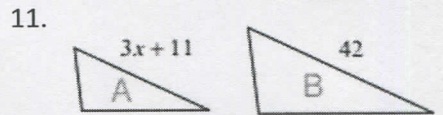
Solve for x. The polygons in each pair are similar.



$8x - 2 = 42$
 $8x = 44$
 $x = 5.5$
 $x = 7$



$x = 11$

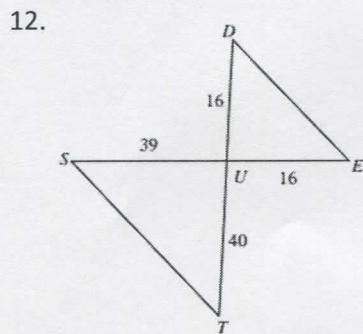


scale factor from A to B = 5 : 6

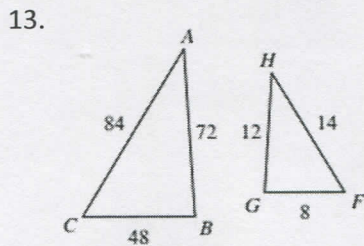
$x = 8$

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

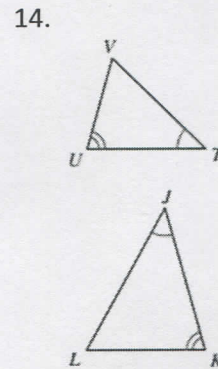
State if the triangles are similar. If they are, state how you know they are similar and complete the similarity statement.



$\Delta UTS \sim$ _____
not ~

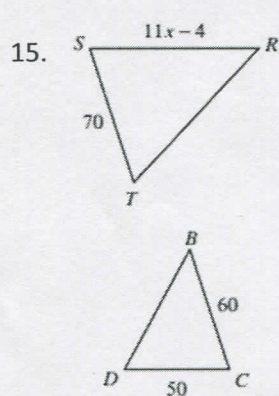


$\Delta CBA \sim \Delta FGH$
SSS ~; 6



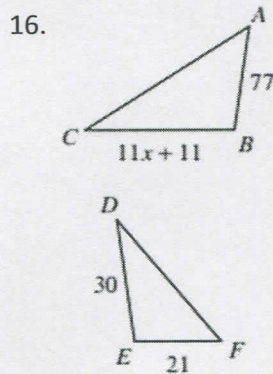
$\Delta JKL \sim \Delta TUV$
AA ~

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



$\Delta STR \sim \Delta CDB$

$x = 8$



$\Delta ABC \sim \Delta FED$

$x = 9$

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

● ● ● ● ● ● ●

1	2	3	4	5	6	7	8
Basic		Intermediate			Advanced		Solved ALL!

