

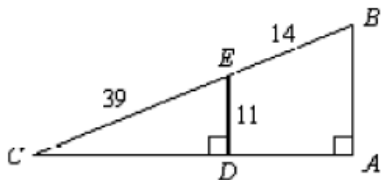
Did you hear about...

A	B	C	D	E	F	G	H
I	J	K	L	M	N	O	P
							?

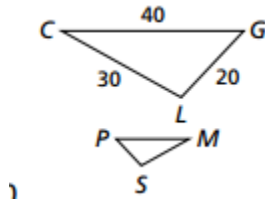
Answer each question below. Find your answers on the attached answer key and notice the word next to it. Write this word in the box containing the letter of that question. Keep working and you will hear about a mistake.

- A) A triangle with a perimeter of 63 feet has side lengths in the extended ratio of 6 : 7 : 8. Find the length of the longest side.

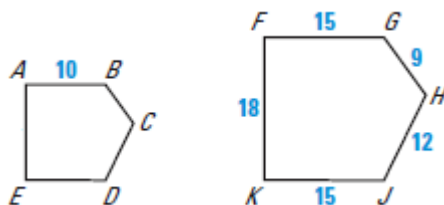
- B) Given that $\frac{ED}{BA} = \frac{EC}{BC}$, find AB to the nearest tenth. The figure is not drawn to scale.



- C) $\triangle CGL \sim \triangle MPS$. The similarity ratio of $\triangle CGL$ to $\triangle MPS$ is 5 : 2. What is the length of \overline{PS} ?

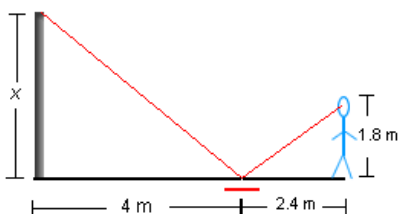


- D) In the diagram, $ABCDE : FGHIK$. Find the perimeter of $ABCDE$.

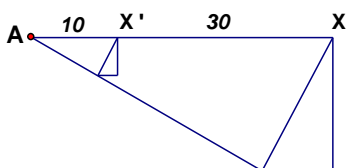


- E) The town of Goodland, Kansas, claims that it has one of the world's largest easels. It holds an enlargement of a van Gogh painting that is 24 ft wide. The original painting is 58 cm wide and 73 cm tall. If the reproduction is similar to the original, what is the height of the reproduction to the nearest foot?

- F) A statue of Scottish hero William Wallace is located in Druid Hill Park. A student looks into a mirror and sees the top of the statue reflected there. Use the information below to determine the unknown height of the statue.

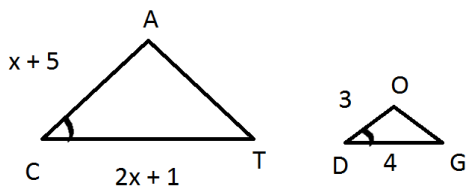


- G) Find the scale factor of the dilation.

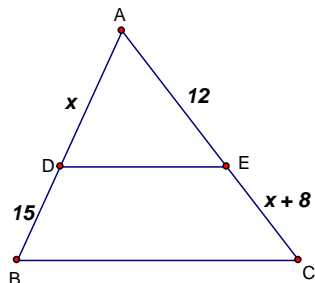


- H) Under a dilation with the origin as the center of dilation, triangle $A(0, 0)$, $B(0, 4)$, $C(6, 0)$ becomes triangle $A'(0, 0)$, $B'(0, 10)$, $C'(15, 0)$. What is the scale factor for this dilation?

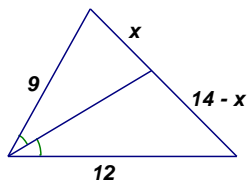
- I) Find the value of x that makes $\triangle CAT \sim \triangle DOG$.



- J) Given $\overline{DE} \parallel \overline{BC}$. Find EC .

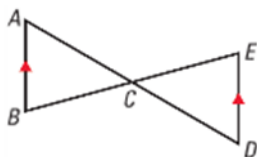


K) Find the value of x .

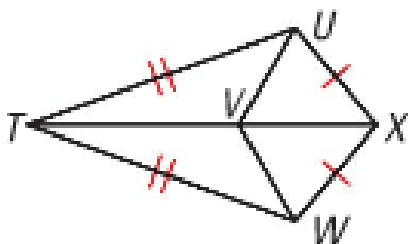


L) What similarity theorem can be used to prove that the two triangles are similar?

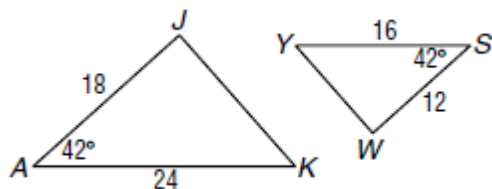
$\triangle ABC, \triangle DEC$



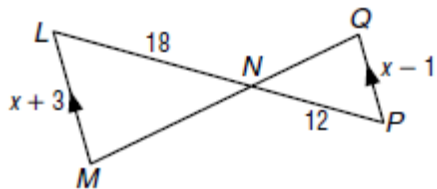
M) What similarity theorem can be used to prove $\triangle TUX \sim \triangle TWX$.



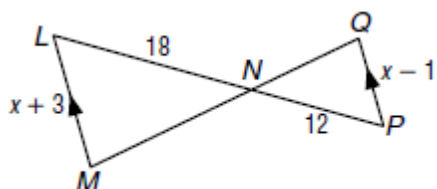
N) Is $\triangle JAK \sim \triangle WSY$? If yes, what similarity theorem can be used? If no, write "Not similar".



O) Identify the similar triangles in the diagram below.



P) Find the value of x in the diagram below.



Answer Key

Answers to A – H

$\frac{1}{4}$	TO
18.2	HAS
2:5	HUG
3	TRIED
8	SAD
24	THE
21	BIG
30	WHO
5:2	KISS
14.9	VERY
46	GUY
1:3	GIRL

Answers to I - P

$\triangle LMN \sim \triangle QPN$	BUT
$\triangle LMN \sim \triangle PQN$	AND
AA~	IN
$\frac{1}{2}$	A
$\frac{1}{3}$	LOST
SAS~	FOG
6	FRIEND
SSS~	THE
$\frac{17}{2}$	HIS
18	GIRL
9	MIST
Not similar	TODAY