$\qquad$
$\qquad$ Period: $\qquad$

1. Pentagon $A B C D E$ is similar to Pentagon RYMNT. Complete the following.
$\angle \mathrm{C} \cong \angle$
$\angle \mathrm{T} \cong \angle$
$\frac{A B}{R Y}=\frac{E D}{\square}$

$$
\frac{N T}{D E}=\frac{R T}{\square}
$$

$\frac{M N}{R T}=\frac{C D}{\square}$
$\frac{A B}{B C}=\frac{R Y}{\square}$

2. The two figures in each question are similar. Create the similarity statement from the diagram.
a) Pentagon GYKMR ~

$\qquad$
b) $\quad \triangle \mathrm{JMT} \sim$ $\qquad$
c) $\quad \triangle \mathrm{BAC} \sim$ $\qquad$
3. Solve for the missing information, given that the two triangles in each question are SIMILAR.
a) Similarity Statement: $\qquad$ b) Similarity Statement: $\qquad$
L


$x=$ $\qquad$
$y=$ $\qquad$
$\mathrm{x}=$ $\qquad$
$y=$ $\qquad$
4. Solve for the missing information, given that the two triangles in each question are SIMILAR.
a) $\triangle \mathrm{QNP}: \triangle H R T$ is $2: 1$

b) $\triangle L M N: \Delta L J$ is $5: 6$

$\mathrm{X}=$ $\qquad$
$y=$ $\qquad$
$x=$ $\qquad$
$y=$ $\qquad$
5. If the three sides of a triangle are in ratio of 1:4:2 and the perimeter of the triangle is 10.5 cm . What is the length of the longest side?

