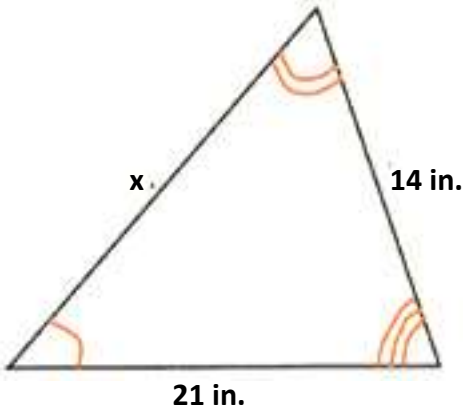
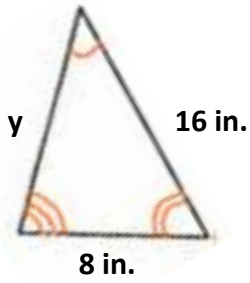
Name: _____ *Period:* _____

Warm-up: 5.1

Use the column on the right to describe the step-by-step process that I used to solve for x and y. In your description, include reasoning for the computations being made.





Side length ratio to solve for y

Computation	Explanation
$\frac{21\ in.}{14\ in.} = \frac{y}{8\ in.}$	
$\frac{21\ in.}{14\ in.} = \frac{3}{2}$	
$8\ in.\ (\frac{3}{2}) = y$	
$\frac{8}{1} in.\ (\frac{3}{2}) = \frac{24}{2}\ in.$	
$\frac{24}{2}\ in. = 12\ in.$	
$y = 12\ in.$	

Name: _____ *Period:* _____

scale factor to solve for x

Computation	Explanation
$\frac{14\ in.}{8\ in.} = \frac{x}{16\ in.}$	
$\frac{14\ in.}{8\ in.} = \frac{7}{4}$	
$16\ in.\ (\frac{7}{4}) = \text{x}$	
$\frac{16}{1} in.\ (\frac{7}{4}) = \frac{16 \bullet 7}{1 \bullet 4}\ in.$	
$\frac{16 \bullet 7}{1 \bullet 4}\ in. = \frac{16}{4} \bullet \frac{7}{1}\ in.$	
$\frac{4 \bullet 7}{1 \bullet 1}\ in. = \frac{28}{1}\ in.$	
$\frac{28}{1}\ in. = 28\ in.$	
$\text{x} = 28\ in.$	