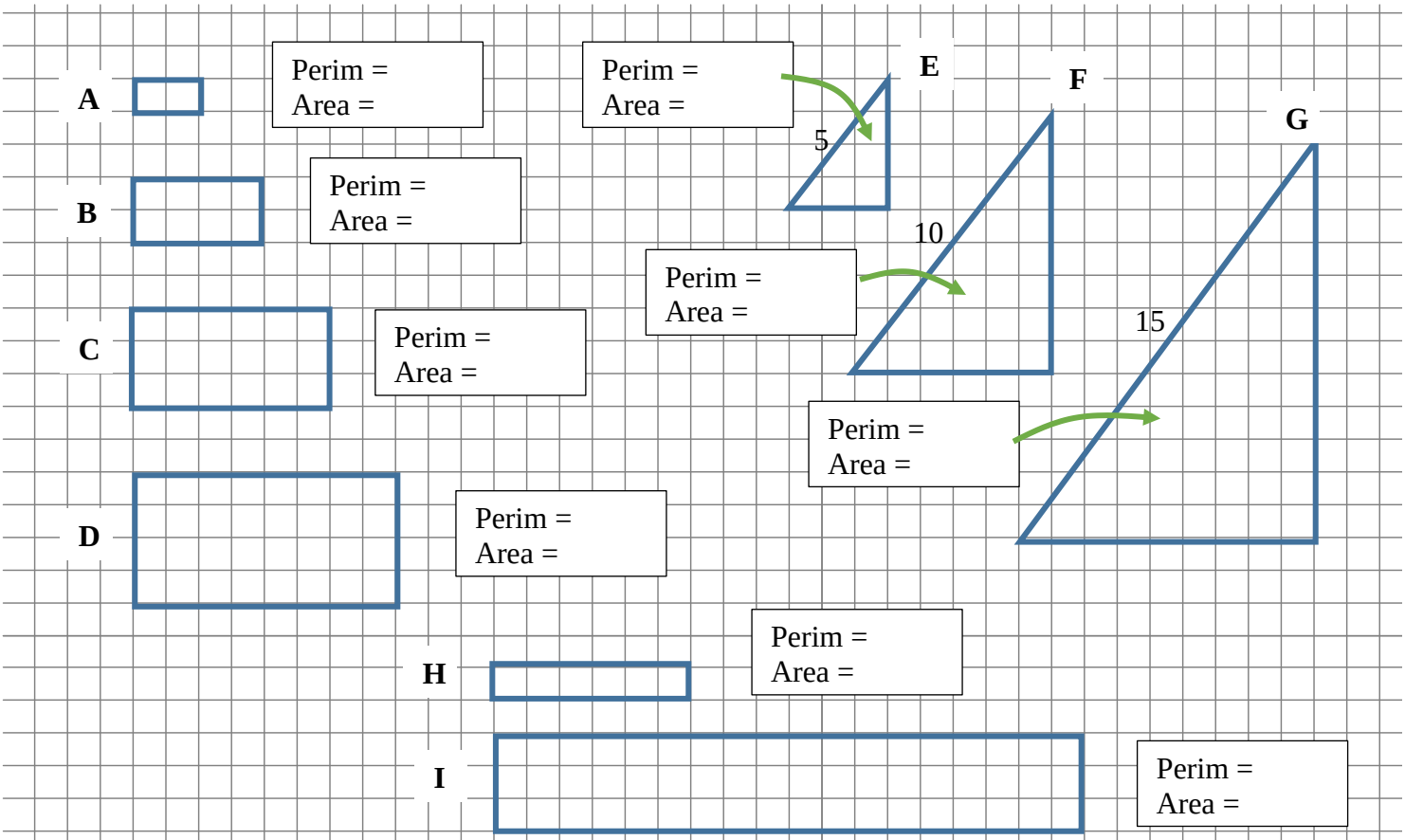
Geometry
Lesson #4: Similarity with Area and Perimeter

Name: _____
Period: _____

Fill in the perimeter and area of each figure.

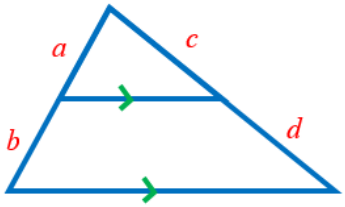


Shapes	Ratio of Sides	Ratio of Perimeters	Ratio of Areas	Description in Words
$\frac{B}{A}$				
$\frac{C}{A}$				
$\frac{D}{A}$				
$\frac{C}{B}$				
$\frac{F}{E}$				
$\frac{F}{G}$				
$\frac{H}{I}$				

Theorems

Theorem 8.6 Triangle Proportionality Theorem

If a line parallel to one side of a triangle intersects the other two sides, then it divides the two sides proportionally.



Example:

1) Find x by drawing the overlapping triangles. Do not use the short cut shown above.	2) Find x using the short cut shown above.