Name: $\qquad$
Date: $\qquad$ Period: $\qquad$

1. Henry looks at the rectangle on the right and says that the base is 5 cm and the height is $\mathbf{3 ~ c m}$. Jennifer looks at it and says that the base is $\mathbf{3 c m}$ and the height is 5 cm . Who is correct? Explain.

2. Demonstrate how using dissection the given parallelogram has the same area as a rectangle with the same base and height.

3. In the previous question, which transformation moved the dissected piece into its new location to form the rectangle? $\qquad$
4. Determine the area of the following figures. (Lines that appear to be perpendicular are perpendicular and lines that appear to be parallel are.)
a) b)


c)

d)

Area $=$

Area $=$ $\qquad$
Area $=$ $\qquad$
Area $=$ $\qquad$
e)

f)

g)

h)


Area $=$ $\qquad$ Area $=$ $\qquad$ Area $=$ $\qquad$ Area $=$ $\qquad$
5. Determine the area of the following rectangles and parallelograms. (Lines that appear to be perpendicular are perpendicular and lines that appear to be parallel are.)
a)

b)

c)

Area $=$ $\qquad$
d)

Area $=$ $\qquad$
Area $=$ $\qquad$
e)


Area $=$ $\qquad$ (2 dec.)

Area $=$ $\qquad$ (Exact answer)

