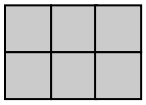
Formative Assessment — Area Unit 1

NAME:_____

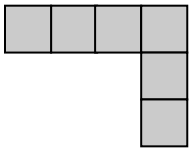
1. Use your ruler in the space below to draw an inch and a square inch.

2. Each of these shapes was made by putting together square inches (pretend that each square is 1 inch on every side). What is the area of each figure? What is its perimeter?



Area = ____in^2

Perimeter = ____in



Area = ____in^2

Perimeter = ____in

3. The area of a rectangle is measured with square inches and with square centimeters. One inch is about $2\frac{1}{2}$ times as long as one centimeter.

   Circle the statement that is true.

   a. The measure of the area of the rectangle is greater with square inches than with square centimeters.
   b. The measure of the area of the rectangle is greater with square centimeters than with square inches.
   c. The measure of the area of the rectangle is not affected by the choice of square inch or square centimeter.

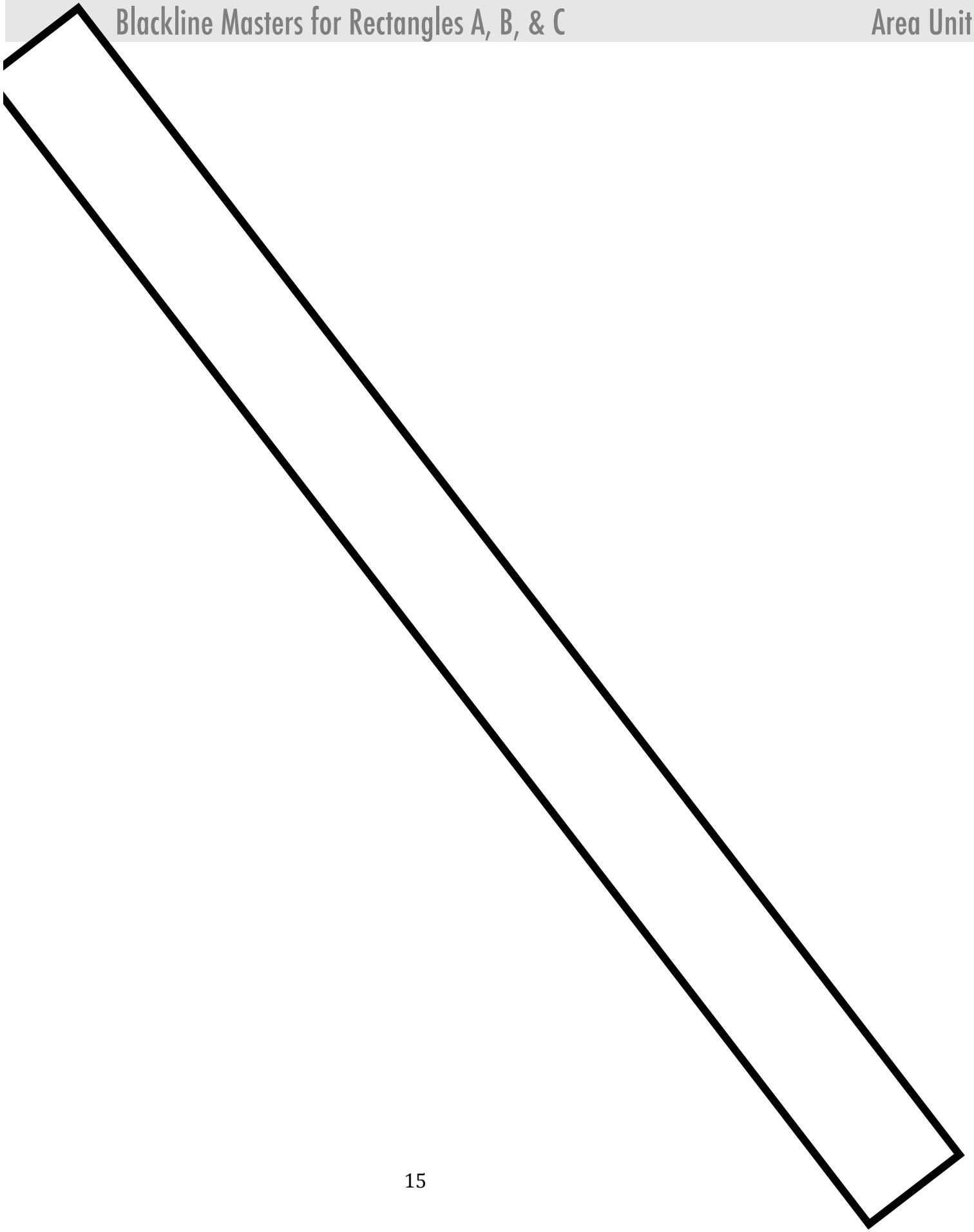
Tell why:

Formative Assessment Record — Area Unit 1

Indicate the levels of mastery demonstrated by circling those for which there is clear evidence:

Item	Level Circle highest level of performance	Description	Notes
Item 1 Constructing and Differentiating Inch and Square Inch.	**ToAM 3D** Recognize/construct suitable units.	Distinguishes between inch and square inch.	
	NL	Cannot construct the distinctions.	
Item 2 Using counts of units for area, edges of squares for perimeter.	**ToAM 3D** Recognize/construct suitable units.	Area as 6 $in.^2$ and perimeters as 10 *in*., 14 in.	
	Other Describe		
Item 3 Extension: Constructing and Differentiating fractional length and area.	**ToAM 3E** Flexible conceptions of appropriate units of area unit, including recognition of inverse relation between unit and area magnitudes.	Chooses b and explains that each square centimeter covers less space and so it takes more of them to cover the area of the rectangle.	

Blackline Masters for Rectangles A, B, & C



Blackline Masters for Rectangles A, B, & C