Formative Assessment

Formative Assessment

Administer the formative assessment and select contrasting student responses to create further opportunities for learning about area measure, especially the difference between units of length measure (perimeter) and units of area measure.

Formative Assessment

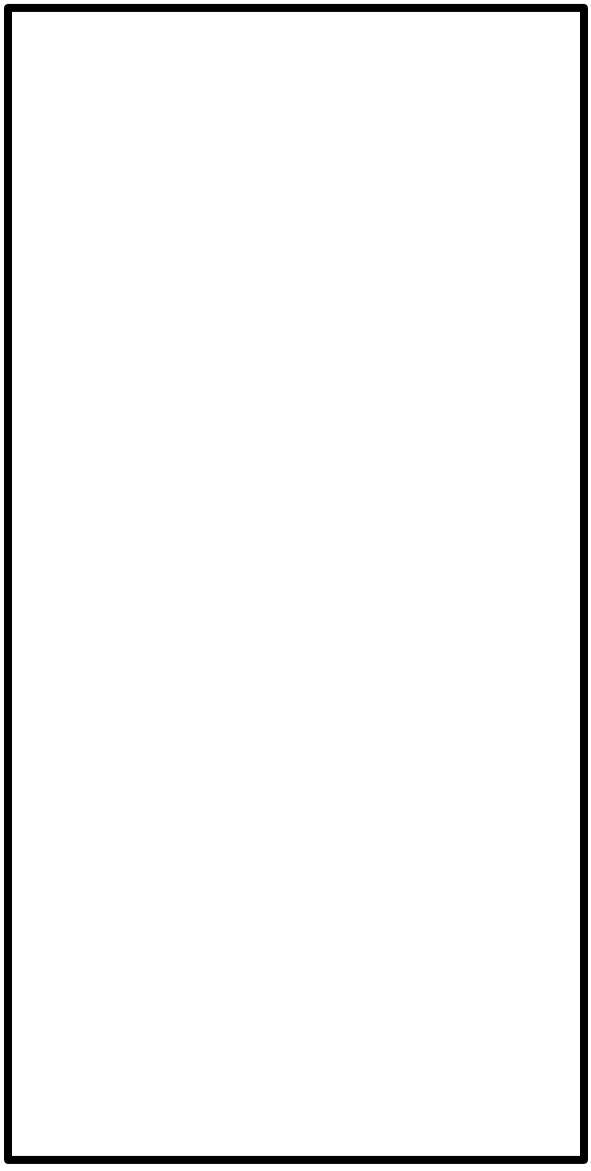
Area Unit 4

NAME:_____

1. What is the area of this rectangle? What is its perimeter? Show the units of area measure. Try this one without using your ruler.

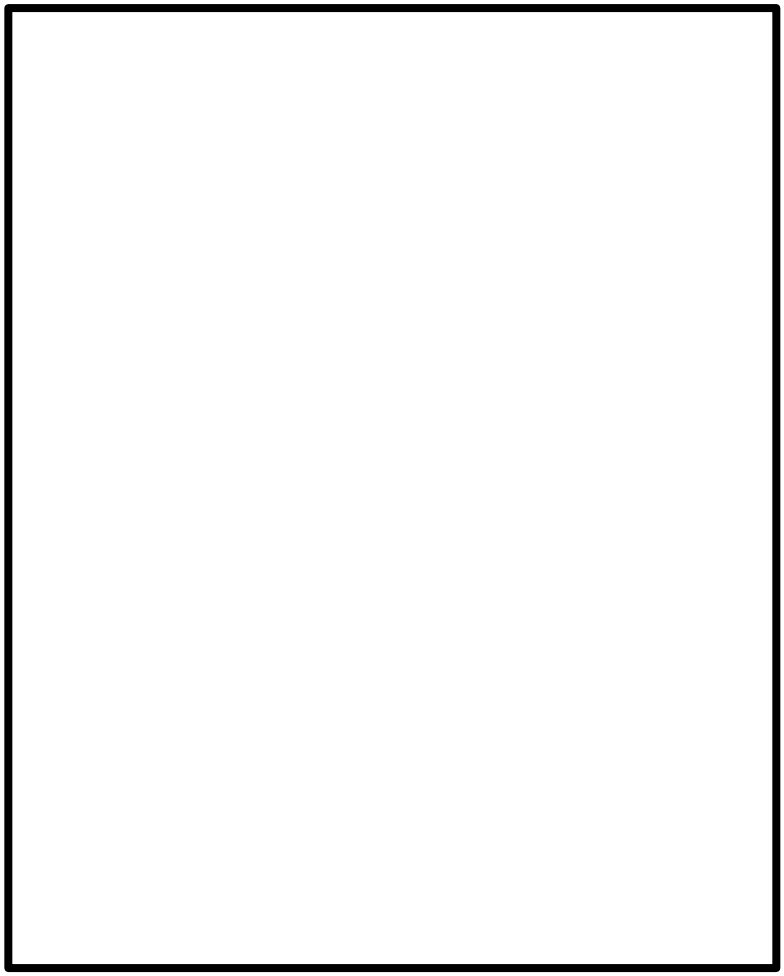
3 u

6 u



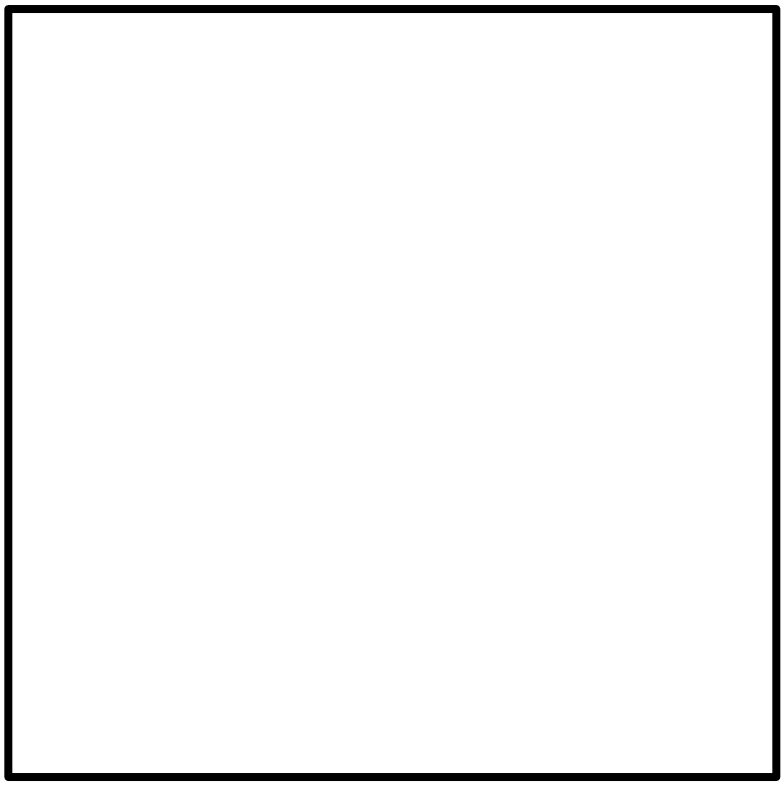
Formative Assessment

2. What is the area of this rectangle? What is its perimeter? Show the units of area measure. You can use your ruler.

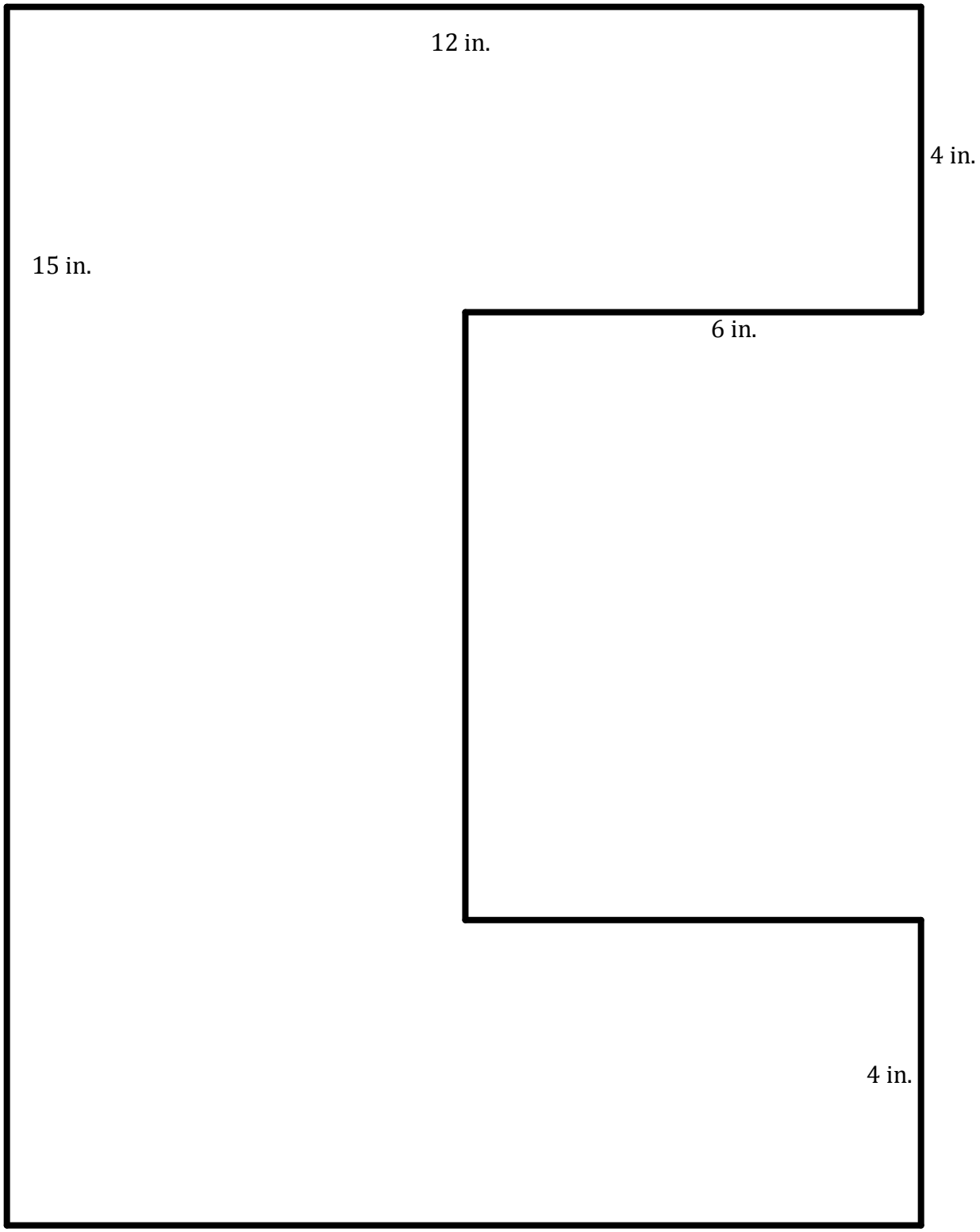


Formative Assessment

3. Here is a square with a side length of 4 inches. What is the length of a rectangle with the same area if one side of the rectangle is 1 inch? How could you show someone that your choice of the side of the rectangle is correct?



4. What is the area of this figure? What is its perimeter? (Notice that the diagram represents inches and is not really 12 inches or 15 inches long.)



Formative Assessment Area Unit 4

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 Finding the area of a $3\ u \times 6\ u$ rectangle and showing 18 $u.^2$	**ToMAA 4A** Given an area, partition into arrays of units by coordinating linear measurements of the shape.	3-splits one side, 3-splits the other side, followed by a 2-split or 2-splits, followed by a 3 split, coordinates splits to show 18 in.^{2}	
	ToAM3B Find and compare areas by counting identical units used to tile.	Cannot coordinate lengths to generate square units but generates some other unit that is used consistently to cover.	
	NL	Cannot partition region systematically.	
Item 2 Finding an area of $5\ in.\ \times 4\frac{1}{2}\ in.$ rectangle	**ToAM3F** Partition to find and compare areas using half-units and other two-splits.	Area as 22 1/2 $in.^2$ and perimeter as 19 $in.$	
	Other Describe		
Item 3 Establish equivalence of area of figure to $1 \times n$ rectangle	**ToMAA 4A** Given an area, partition into arrays of units by coordinating linear measurements of the shape.	Shows that 1 in. x 16 in. rectangle has same area as 4 in. x 4 in. square.	
Item 4 Find the area of a figure by finding the sum of the areas of its parts. Differentiate perimeter from area.	**ToMAA 4A** Given an area, partition into arrays of units by coordinating linear measurements of the shape.	Uses length measures on figure and properties of rectangles to find area, either by subtraction (area of 15 x 12 rectangle- 7 x 6 rectangle) or by partitioning and finding areas of smaller rectangles, then summing. Note strategy.	