

## Third Grade Cluster 6 Assessment Teacher Guide



**This assessment assesses students' ability to:**

- Show rectangles with the same perimeter and different areas
- Show rectangles with the same area and different perimeters
- Measure area by counting unit squares
- Measure perimeter by counting unit segments

### **Common Core Standards:**

This assessment addresses each of the following Common Core Standards):

Standard	Questions
3.MD.7	4
3.MD.8	1, 2, 3, 5, 6, 7

### **Data Driven Instruction:**

This assessment is one data point and should be used with data gathered from multiple sources to make an informed decision about each student's misconceptions and mastery.

## 3rd Grade – Perimeter Assessment – Scoring Guide

Question	Standard	Answer
1	3.MD.8	C
2	3.MD.8	D
3	3.MD.8	A
4	3.MD.7	C
5	3.MD.8	B
6	3.MD.8	A
7	3.MD.8	Rubric

### Question 7 (5 points):

Student receives 1 point for each of the following bullets:

- Student correctly identifies the area (30 square units) and perimeter (26 units) of Lien's rectangle.
- Student draws Ezra's rectangle with an area of 30 square units, but a perimeter greater or less than 26 units (Possible dimensions: 1 x 30, 2 x 15, 5 x 6)
- Student identifies the correct perimeter for Ezra's rectangle (1x30 is 62 units, 2 x 15 is 34 units, 5 x 6 is 22 units).
- Student draws Catina's rectangle with a perimeter of 26 units, but an area that is greater or less than 30 units (Possible dimensions: 1 x 12, 2 x 11, 4 x 9, 5 x 8, 6 x 7)
- Student identifies the correct area for Catina's rectangle ( 1 x 12 is 12 sq units, 2 x 11 is 22 sq units, 4 x 9 is 36 sq units, 5 x 8 is 40 sq units, 6 x 7 is 42 sq units)

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

### 3rd Grade Assessment

**Directions:**

Calculator Active:

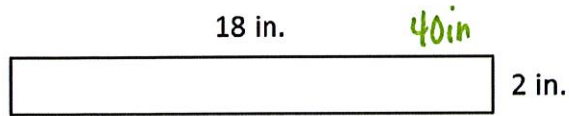
You may use a calculator for this test.

Solve each problem and show your work.

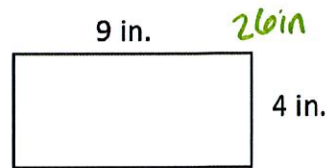
1. Trahsean drew four rectangles with the same area. Which rectangle has the smallest perimeter?



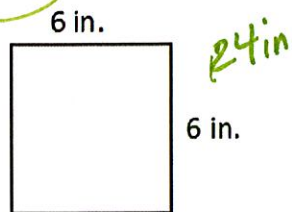
A



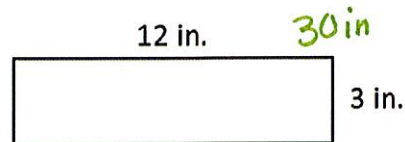
B



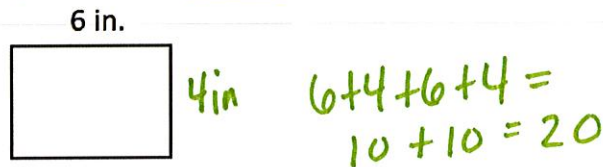
C



D



2. Carlos drew this rectangle with an area of 24 square centimeters.



What is the perimeter of Carlos' rectangle?

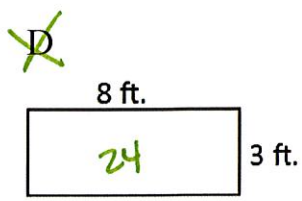
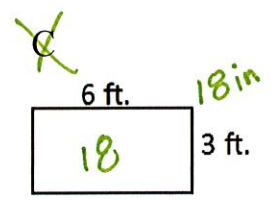
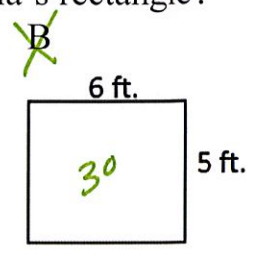
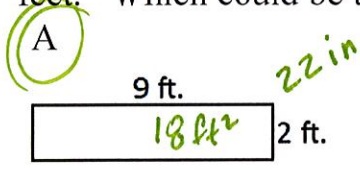
A 10 inches

B 12 inches

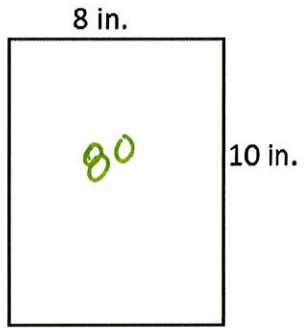
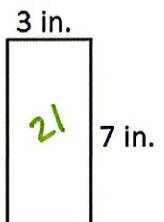
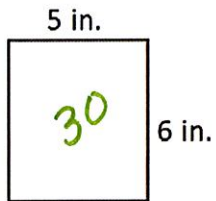
C 16 inches

D 20 inches

3. Laila drew a rectangle with a perimeter of 22 feet and an area of 18 square feet. Which could be the dimensions of Laila's rectangle?



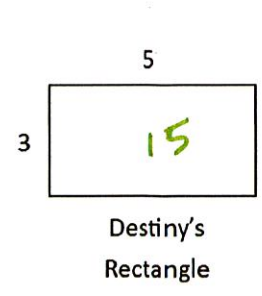
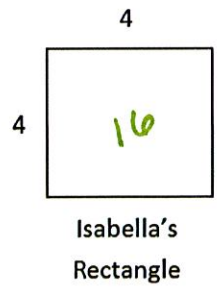
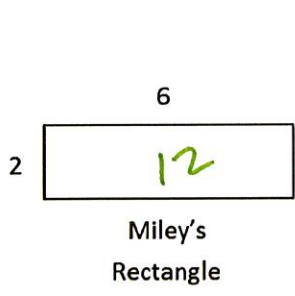
4. Avery made a poster by taping three pieces of paper together. The dimensions of the three pieces of paper are below.



$$\begin{array}{r} 80 \\ 30 \\ 21 \\ \hline 131 \end{array}$$

What is the area of Avery's poster?

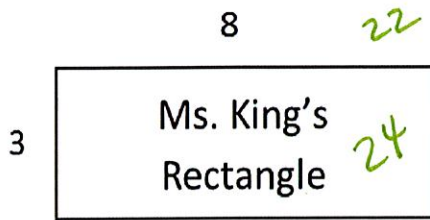
- A 110 square inches      B 121 square inches  
**C 131 square inches**      D 138 square inches
5. Miley, Isabella, and Destiny each drew a rectangle with a perimeter that was 16 units.



Which of the following statements is true?

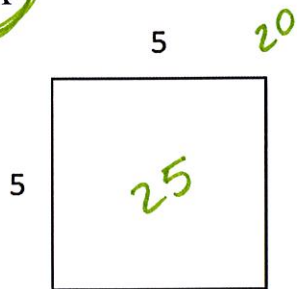
- ~~A~~ The perimeter of the rectangles is the same, so the area is the same.  
~~B~~ Miley's rectangle has the smallest area.  
~~C~~ Isabella's rectangle has the smallest area.  
**D** Destiny's rectangle has the smallest area.

6. Ms. King drew a rectangle on the board.

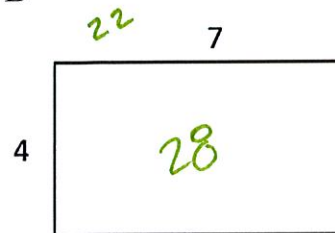


Which rectangle below has a smaller perimeter and a greater area than Ms. King's rectangle?

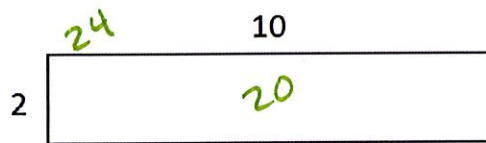
A



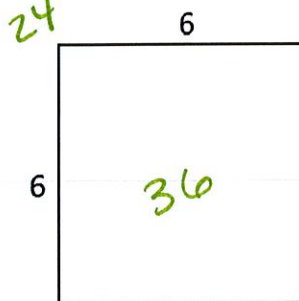
B



C



D



## Open Response



Question 7 is an open response question.

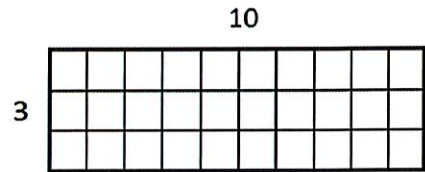
You will need to use pictures, numbers, or words to answer these questions.

7. Lien drew this rectangle on grid paper. →

What is the area of Lien's rectangle?  $30 = 3 \times 10$

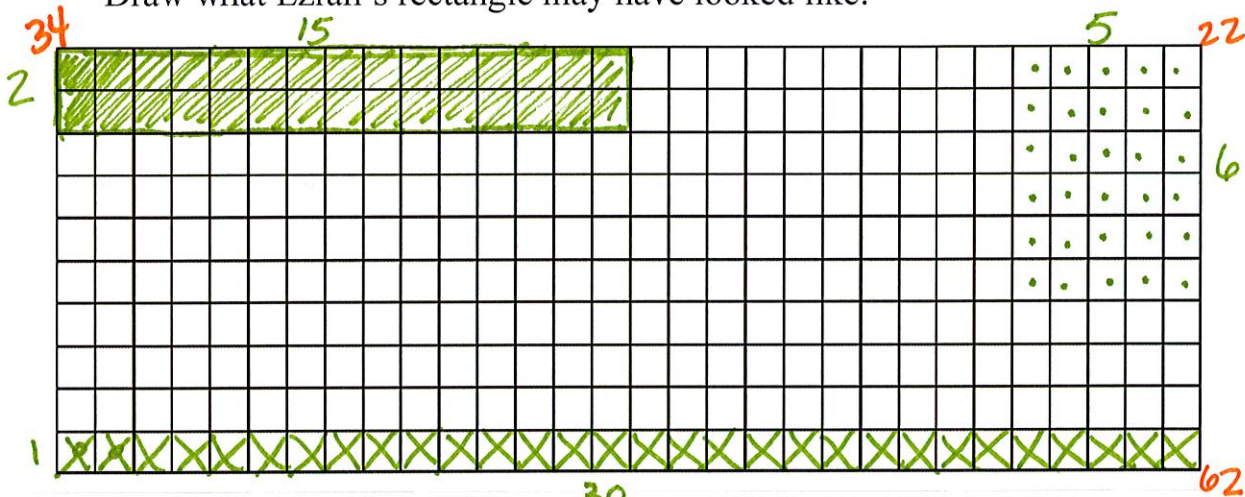
What is the perimeter of Lien's rectangle?  $26 = 13 + 13$

Lien's Rectangle



Ezrah drew a rectangle on his graph paper too. His rectangle had the same area as Lien's rectangle, but the perimeter of Ezrah's rectangle was different.

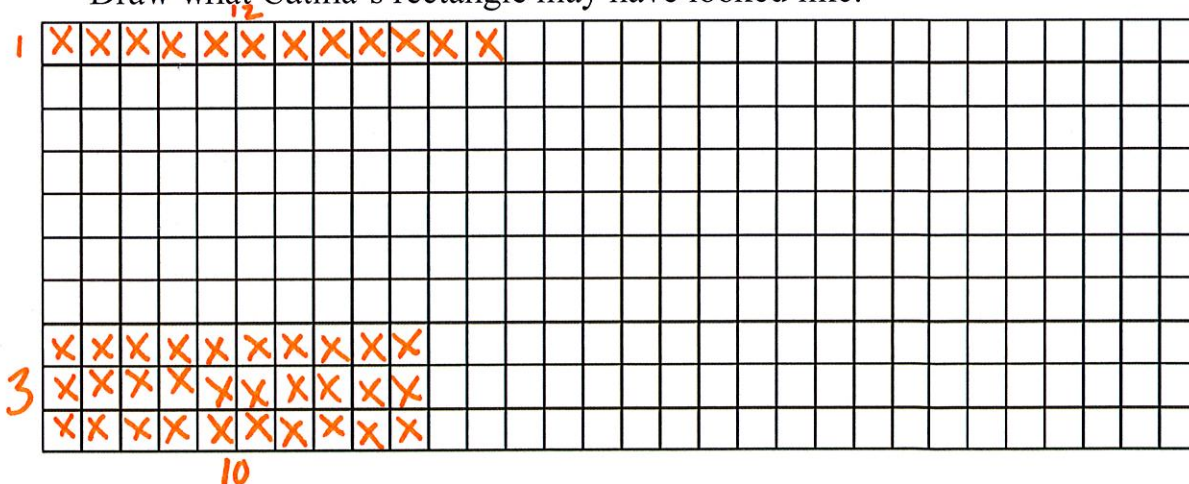
Draw what Ezrah's rectangle may have looked like:



What is the perimeter of the rectangle you drew? \_\_\_\_\_

Catina drew a rectangle on her graph paper too. Her rectangle had the same perimeter as Lien's rectangle, but the area of Catina's rectangle was different.

Draw what Catina's rectangle may have looked like:



	Area
1 x 12	12
2 x 11	22
3 x 10	30
4 x 9	36
5 x 8	40
6 x 7	42

What is the area of the rectangle you drew? \_\_\_\_\_