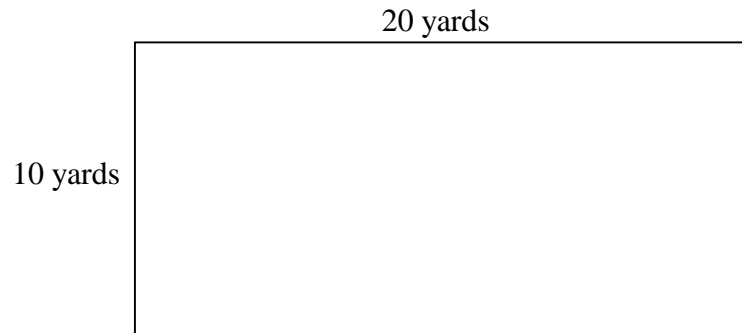


Name \_\_\_\_\_

## Fair Play

The Grade 4 students have a play space. These are its measurements:



1. What is the area of the play space? \_\_\_\_\_ square yards

Show how you figured this out

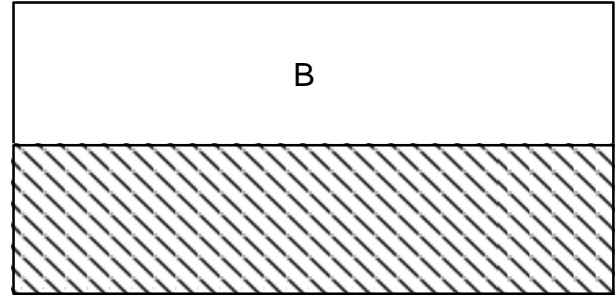
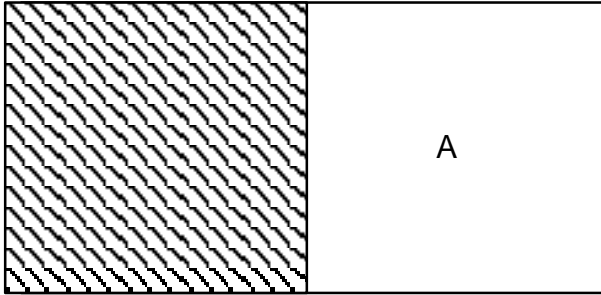
2. The students would like a fence to be put around the play space to stop balls from going too far.

What will the total length of the fence need to be? \_\_\_\_\_ yards

Show how you figured this out.

3. Some students say that other students take up too much space with their ball games. They want the play space to be split into two equal parts.

Here are two possible ways of dividing the play space:



What are the perimeters of these play spaces?

A = \_\_\_\_\_ yards

B = \_\_\_\_\_ yards

4. Draw a straight line that divides the play space into two equal parts in a **different** way.



5. The teacher gives the students the same amount of fencing as needed for the original play space so they can build another rectangular play space. It needs to have a greater area than the original play space.

What could the dimensions of this new play space be?

Length: \_\_\_\_\_ yards

Width: \_\_\_\_\_ yards

Explain how you know your answer meets the criteria.

Fair Play	Rubric	
	points	section points
<p>The core elements of performance required by this task are:</p> <ul style="list-style-type: none"> <li>to find areas and perimeters of rectangles.</li> </ul> <p>Based on these, credit for specific aspects of performance should be assigned as follows</p>		
<p>1. Gives correct answer: <b>200</b> square yards</p> <p>Shows work such as: <math>20 \times 10 = 200</math></p>	<p>1</p> <p>1</p>	<p>2</p>
<p>2. Gives correct answer: <b>60</b> yards</p> <p>Shows work such as: <math>10 + 20 + 20 + 10 = 60</math></p>	<p>1</p> <p>1</p>	<p>2</p>
<p>3. Gives correct answer: A = <b>40</b> yards</p> <p>Gives correct answer: B = <b>50</b> yards</p>	<p>1</p> <p>1</p>	<p>2</p>
<p>4. Makes an area such as: a right triangle.</p>	<p>1</p>	<p>1</p>
<p>5. Gives dimensions whose sum is 30 yards (60 yard perimeter) but when multiplied creates a product greater than 200 square yards, such as:</p> <p><b>11 x 19, 12 x 18, 13 x 17, 14 x 16, 15 x 15</b></p> <p><i>Accept if a student's answers to #1 or #2 are incorrect, shows dimensions that support the student's answer of perimeter from #2 with a greater area than student's answer to #1.</i></p> <p>Gives reasoning that shows answer keeps the perimeter the same and increases the area from the original play space.</p>	<p>1</p> <p>1</p>	<p>2</p>
<b>Total Points</b>		<b>9</b>