New York State Testing Program

Mathematics
Book 2

Grade 5

March 6—10, 2006
Name ____________________________
TIPS FOR TAKING THE TEST
Here are some suggestions to help you do your best:

• Be sure to read carefully all the directions in the test book.
• You may use your tools to help you solve any problem on the test.
• Read each question carefully and think about the answer before writing your response.
• Be sure to show your work when asked. You may receive partial credit if you have shown your work.

This picture means that you will use your ruler.

This picture means that you will use your protractor.
There are 216 trees to be planted in a park. There are 54 people who will plant the trees. Each person will plant the same number of trees.

How many trees will each person plant?

*Show your work.*

**Answer** _______________ trees

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**Part A**

Draw all the lines of symmetry on the square below.

![Square with lines of symmetry](symbol)

**Part B**

How many lines of symmetry can be drawn on the square?

**Answer** _______________ lines of symmetry
Use your ruler to help you solve this problem.

Use your protractor to help you solve this problem.

Richard cut a shape from a sheet of paper. His shape is described below:

• It is a quadrilateral.
• Two angles measure 60° each, and two angles measure 120° each.
• Each side is the same length.

What is the name of the shape that meets all of the characteristics listed above?

**Answer** ________________

In the space below, draw the rest of Richard’s shape.

[Diagram of a shape with a 60° angle and a 120° angle, indicating a rhombus]
Sydney wants to buy 5 books. Each book costs $5.95. Estimate about how much Sydney will spend on the books (without adding tax).

**Answer** $ _____________________

On the lines below, explain to Sydney how to estimate the total cost of the 5 books (without adding tax).

________________________________________________________________________

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________________________________________________________________________
The table below shows the amount of electricity the Quintero family used over 3 days. Electricity is measured in units called kilowatt-hours (kWh).

<table>
<thead>
<tr>
<th>Day</th>
<th>Amount (in kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>37</td>
</tr>
<tr>
<td>Tuesday</td>
<td>41</td>
</tr>
<tr>
<td>Wednesday</td>
<td>50</td>
</tr>
</tbody>
</table>

**Part A**

What was the total amount of electricity used over the 3 days?

*Answer* ______________ kWh

**Part B**

The cost of electricity is $0.07 per kWh. Find the total cost of the electricity the Quintero family used over the 3 days.

*Show your work.*

*Answer* $____________
Triangle ABC, with the given angle measures, is shown below.

What is the measure of \( \angle ABC \)?

**Answer** ______________ degrees

On the lines below, explain how you can determine the measure of the angle without using a protractor.
The table below shows the heights of a sunflower over a 6-week period.

### SUNFLOWER HEIGHT

<table>
<thead>
<tr>
<th>Week</th>
<th>Height (in inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>$2 \frac{1}{2}$</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>$5 \frac{1}{2}$</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>$8 \frac{1}{2}$</td>
</tr>
</tbody>
</table>
Use the information in the table to make a line graph on the grid below.

Be sure to
• title the graph
• label both axes
• graph all the data
• provide a scale for the graph

[Grid representation]
Use your ruler to help you solve this problem.

Part A

Sue drew the octagon shown below.

What is the perimeter, in centimeters, of Sue’s octagon?

Show your work.

Answer ________________ centimeters
Part B

John drew an octagon. Each side was 4 times as long as the sides of Sue's octagon. What is the perimeter, in centimeters, of John’s octagon?

Show your work.

Answer _______________ centimeters