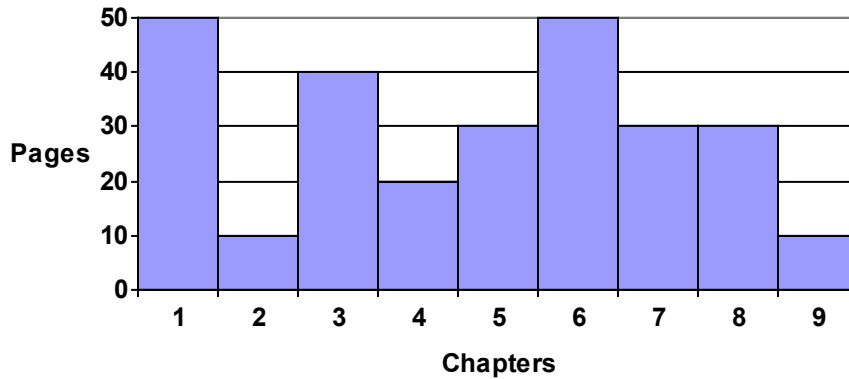Student Name: _____

1. The writing of "The Nine Chapters on the Mathematical Arts" was finished at the beginning of the year 100. However, the book was not discovered until the beginning of the year 279. How long did the book remain unpublished for?

   Answer: _____

2. What is the smallest 5 digit positive integer whose 5 digits are all different?

   Answer: _____

3. The 9 chapters of "The Nine Chapters on the Mathematical Arts" have length as shown in the following graph:
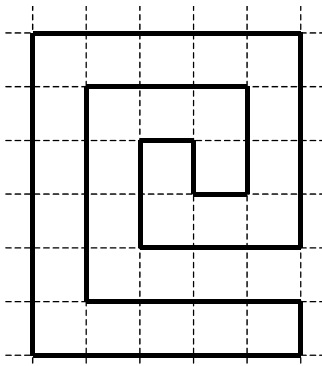

   What is the average length of a chapter?

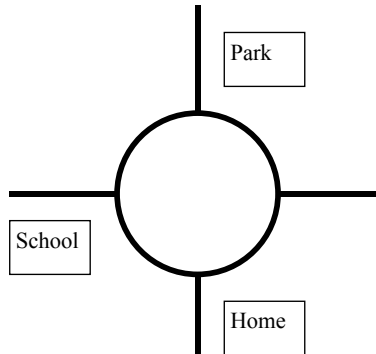   Answer: _____

4. What is the perimeter of the figure below?

   Answer: _____

Student Name: _____

5. Roundabouts can only be traversed counterclockwise. In the given diagram, you start at home want to go to the school to pick up a soccer ball, and then want to go to the park to play soccer. How many degrees do you need to go around the roundabout to be able to play soccer?

Answer: _____

6. You buy a pack of 10 pens, and notice that there are 7 different colours, including purple. There are 2 blue pens, 2 red pens, and 2 green pens. How many purple pens are there?

Answer: _____

7. I have a 2-digit number that is divisible by 7. When you flip its digits around, it is still a 2-digit number that is divisible by 7. What is this number?

Answer: _____

8. What is the shaded area in the diagram below?

Answer: _____