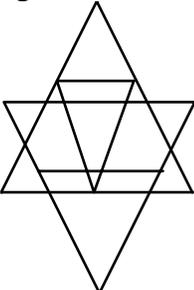


**Mount Rainier Math Invitational**  
**Fifth Grade - February 10, 2006**  
**Team Geometry Test**  
 written by Samantha Mulanex and Anh Le

Put all answers on the colored answer sheet. All fraction answers must be reduced

<b>Problems 1 through 5 are worth 2 points each</b>	
1	There are two trees right next to each other. One tree is 20ft. tall and has a 50ft shadow and the other is 8 ft. tall. How long is the shadow of the second tree?
2	If the perimeter of each square is 12 cm., what is the perimeter of the figure below? <div style="text-align: center;">  </div>
3	What is the length of the base of the figure below, if the height is 11 in. and the area is 110 in <sup>2</sup> ? <div style="text-align: center;">  </div>
4	How many lines of symmetry does a regular hexagon have?
5	A box is 7 in. tall, 10 in. wide and 8.5 in. deep. What is the total surface area of the box (including the top and bottom)?
<b>Problems 6 through 10 are worth 3 points each</b>	
6	Tommy was feeding the animals at the zoo whose cages are all in a line on a hill. He started at the monkey's cage; then he walked down the hill 3 cages to feed the birds. The birds are in the first cage in the zoo. Then Tommy went up the hill 7 cages to feed the seals. From there he went down the hill 5 cages to feed the bears. Next he went up the hill 8 cages to the elephants. They are in the last cage in the zoo. How many cages are there in the zoo?
7	How many triangles are in the figure below? <div style="text-align: center;">  </div>

8	Five flags are spaced evenly around a track. It took a runner 50 seconds to get from the first flag to the third flag. If the runner continues at the same speed, how many seconds will it take her to get completely around the track?
9	A rectangular packing box is 6 ft. wide, 3 ft. deep, and 2 ft. in height. Jewelry boxes are to be packed within this box. If the jewelry boxes are 1 ft. wide, 6 inches deep and 6 inches high, what is the maximum number that can fit in the packing box?
10	Jackie went fishing. On the first cast she hooked a trout 80 feet from the boat. Each time she reeled in 10 feet of line the trout would take out 5 feet. How many times did she have to reel in to get the fish to the boat?