

**Mount Rainier Math Invitational**  
**Sixth Grade - January 28, 2005**  
**Team Pressure Round**

written by Catherine Tart and Chanel Fuchigami

Put all answers on the colored answer sheet. All fraction answers must be reduced. You should leave appropriate answers in terms of  $\pi$ . The first answer submitted is worth 3 points, the second 4 points, ..., and the fifth answer is worth 7 points. You may turn in your answers in any order but each question may only be answered once!

1	What is the perimeter of a rhombus whose diagonals measure 6 and 8 units?
2	Chanel had a standard deck of cards with 52 cards. Only, her sister, Hannah, stole all of the 3's. With her new deck of cards, what is the probability of drawing a red king or a seven?
3	Mrs. Jingleheimer lives 2 miles from the bean-stalk kiosk. The first time she ventured to the kiosk, she got half way when she remembered she forgot her sunglasses and scooted back home to get them. But after traveling 1 mile on the way to the kiosk, she realized she had dropped her lip gloss and went half a mile back to retrieve them. Finally, she scooted the rest of the way to the kiosk. After purchasing her bean-stalk, half way home, she realized she had forgotten her quill at the kiosk and scooted back to pick it up, and finally scooted two miles home. How many miles did Mrs. Jingleheimer scooter, in total, that day?
4	If Catherine has bought a pizza with diameter of 20. Trevor scarfed down $\frac{3}{5}$ of the pizza. Chanel ate $\frac{1}{4}$ of what was left. Mr. Tosch then ate $\frac{2}{3}$ of what was left. In terms of $\pi$ , how much pizza is left for Catherine?
5	What is $48+12\div 3\times 2-6$ ?