

Week One Sept 16-22, 2008**The Flight of the Daring Wasp**

Two golf carts are facing each other 200. m apart. Cart A accelerates at a constant rate of 0.400 m/s^2 toward B and cart B accelerates at a constant rate of 0.600 m/s^2 toward A. A wasp on the front bumper of cart A takes off just as the two golf carts, starting from rest, accelerate toward each other. The wasp flies to B, tags the front bumper and returns to A where he tags the front bumper and returns to B and so on until he is squashed in the inevitable collision. If the wasp flies at a speed of 0.500 m/s in the trips back and forth, how much total distance does he cover before he is squashed?

- A) 1.00 m
- B) 2.00 m
- C) 5.00 m
- D) 10.0 m
- E) 20.0 m
- F) 50.0 m
- G) 100. m
- H) 200. m

Student Name (Print) _____ Indicate which course you are in.

PHYS203 Sec _____ PHYS 221 Sec _____ Physics Major 1st ___ 2nd ___ 3rd ___ 4th ___

Letter of Selected Answer _____ **1 pt for correct answer**

Explanation Supporting Answer **0-3 pts for verbal / mathematical reasoning**

Submit your answer to Mrs. Sliwa or place in the Puzzler Box in room 202 Grimsley.