Show and explain your work throughout!

**Show work** and indicate answers on your own paper.

NO credit will be given, even for correct answers, WITHOUT justifying work.

**1. 0.00325 x 10-8 cm equals**

A. 3.25 x 10-12 mm B. 3.25 x 10-11 mm

C. 3.25 x 10-10 mm D. 3.25 x 10-9 mm

**2. You measure the length and width of a rectangle to be 1.125 m and 0.606 m, respectively. You calculate the rectangle's perimeter by adding these and multiplying by two. Your calculator's display reads 3.462. To the correct number of significant figures, this should be written**

**As**

A. 3.5 m B. 3.46 m C. 3.462 m D. 3.4620 m

**3. Consider a boat that can travel with speed V in still water. For which of the following trips will the elapsed time be least?**

A. Boat travels a distance 2d in still water.

B. Boat travels a distance d upstream and then returns to its starting point.

C. Boat travels a distance d downstream and then returns to its starting point.

D. The time is the same in all of the above cases.