

Name _____

College you would like to go to _____

Show your work and circle your answers to receive full credit.

When you have finished this, go to the website and check your answers. If you got a problem wrong, cross it off on the front, and do it correctly on the back.

1-3: A boat points straight across a 68.0 m wide river and crosses it in 18.2 seconds. In doing this it is carried downstream 23.7 m

1. What the boat's velocity with respect to the water?

2. What is the speed of the current?

3. What is the velocity (in angle magnitude notation) of the boat as it moves across the river? Draw a picture of the velocity.

4-5: A boat pointed straight across has a velocity of 3.72 m/s in a river with a current of 1.31 m/s. The river is 47.2 m wide.

4. What time will it take you to cross?

5. How far downstream is the boat carried as it crosses the river?