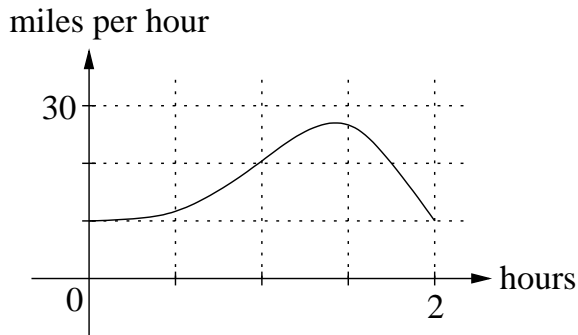


Name \_\_\_\_\_

1. (3 points) A cyclist's velocity during a 2-hour ride is shown in the graph below. Estimate the distance that she rode?



2. (3 points) It is estimated that  $t$  days from now a farmer's crop will be increasing at the rate of  $0.3t^2 + 0.6t + 1$  bushels per day. By how much will the value of the crop increase in the next 5 days if the market price remains fixed at \$3 per bushel?
3. (4 points) At 4 AM, the layer of ice on Lake Mendota was 6 inches thick and its thickness was changing at a rate of  $0.2t$  inches per hour where  $t$  represents the number of hours since 4 AM. How thick was the ice at noon that same day?