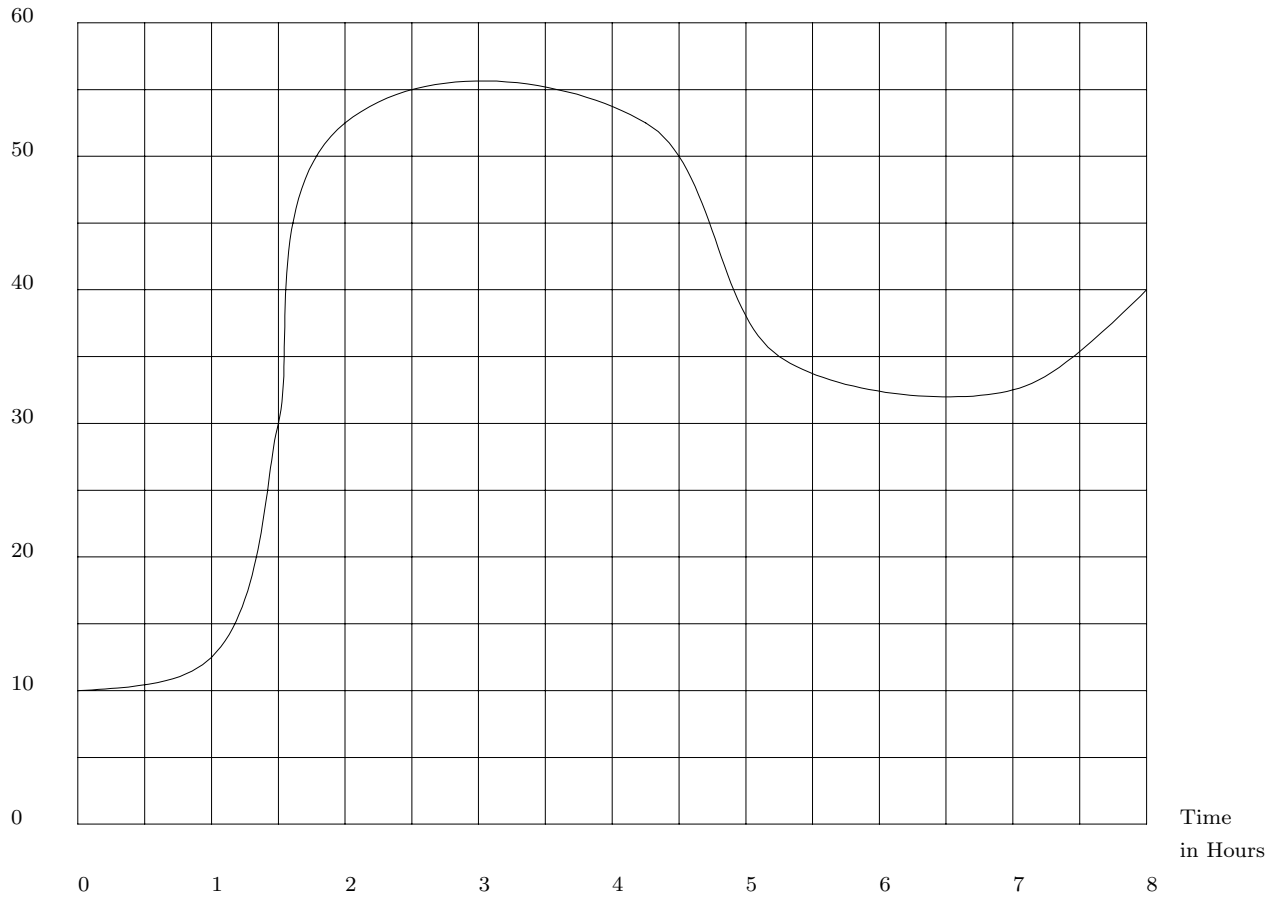


Worksheet on Integration

A boat leave from Charleston an heads South toward Florida. Part of the time the boat moves at close to maximum speed and other times it slows down to do some fishing. The velocity of the boat during the first eight hours is given by the following table:

Velocity in miles/hour



1. How much distance does each square in the graph represent? _____
2. Give an estimate for the distance traveled during the first three hours of the trip. _____

3. Give upper and lower bounds for the distance traveled during the last two hours represented on the graph.

Upper Bound = _____

Lower Bound = _____
4. Write an explanation why the area under the graph represents the the total distance travel during the eight hours.