

3. The speed limit on the Massachusetts Turnpike is 65 mph. Suppose (hypothetically) that the speeds of cars passing the Worcester exit is observed to follow a normal probability density with mean 70 mph and standard deviation 5 mph.
- (a) On the accompanying set of axes, sketch this normal probability density function.
 - (b) Suppose that the state police will stop cars for speeding if they exceed 72 mph. On the graph, shade the region representing those cars that would **not** be stopped for speeding.
 - (c) Use the normal table to determine the percentage of cars that would not be stopped for speeding. (Show your calculations.)

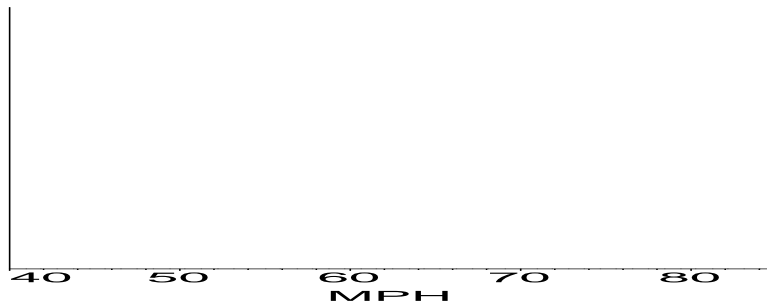


Figure 1: