

**Math 80 Quiz #2**  
**January 20, 2010**

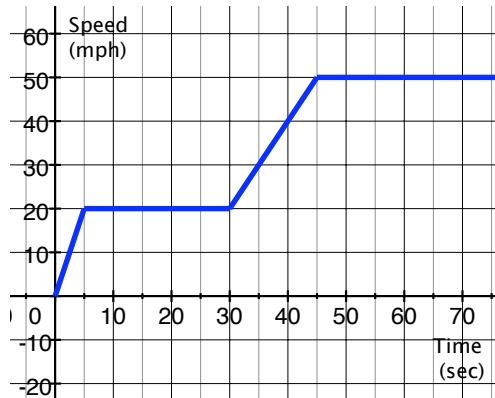
Name: \_\_\_\_\_

Show all work on a separate sheet. Put a box around your final answer. No calculators are permitted.

1. (4 pts.) Anne and Betty are biking in a race against each other, so they leave from the same point at the same time. Ann bikes at a speed of 44 ft/sec and Betty bikes at a speed of 52 ft/sec.

When will it take for Betty to be 100 feet ahead of Anne? (Use equations to solve and write your answer in a **complete sentence**.)

2. The following graph shows the speed of a car as it goes onto the freeway over time in seconds.



(a) (1 pt.) How long was the speed of the car a constant 20 mph?

(b) (1 pt.) What was the speed of the car 35 seconds after the start of the trip?

(c) (1 pt.) When does the car start going 50 mph?

3. (3 pts.) Graph the linear equation  $y = -\frac{1}{3}x + 2$ . (Use at least 3 points and clearly label them. Draw a neat set of axes.)