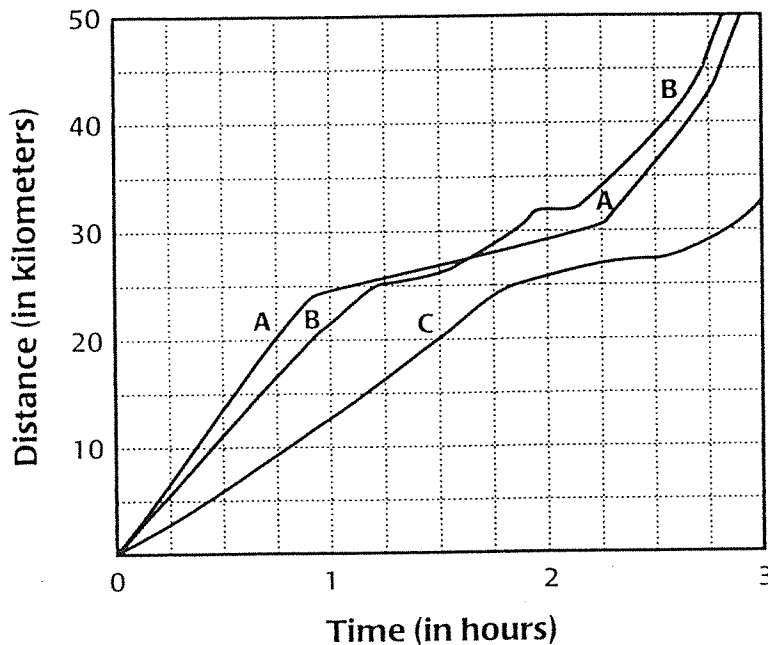


# ~ A Bicycle Race! ~

Algebra P3-P4  
Homework #2

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

The following graph represents a 50-kilometer bicycle race with three competitors. Study the graph to answer the following questions. Be sure to explain your answers.



a. Who won the race and in how much time? \_\_\_\_\_

b. Which competitor had the fastest start? How do you know? \_\_\_\_\_

c. What might explain the graph for cyclist B at two hours into the race? \_\_\_\_\_

d. There is a very steep hill in this course. How many kilometers into the race do the riders hit the hill? How do you know? \_\_\_\_\_

e. What do you think competitor C's final time was? \_\_\_\_\_

2. Write a paragraph about the race. Include important information shown on the graph, including information different from what's above.

Solve the equations. Show steps!

3.  $5x + 3 = -17$

4.  $-4 = -2x + 10$

5.  $4x + 18 = 3x$

6.  $\frac{x}{4} - 5 = 5$

7.  $3 - 2x = 3$

8.  $n - 6 = 2n - 14$

9.  $5m - 3 = 2m - 9$

10.  $2x + 3 = 3x + 5$

11.  $11m + 2 = 9m - 18$

12.  $\frac{y}{-24} = 10$

13.  $m + \frac{1}{2} = \frac{5}{6}$

14.  $\frac{2w}{5} = 11$