

Name: _____ Date: _____ Per: _____

Biking the Triathlon

a. Define slope in your own words

- going fast then getting tired & slowing • slide
- a certain pattern going a certain way • hill
- going up & down • angle of line

b. Based on the graph, list the bicyclists from slowest to fastest.

How can you tell? (hint: look at the **steepness** of the lines)

D A or C Cor A B
Slowest Fastest

c. Where do the 4 and 6 come from on Racer A's triangle? What does each number represent?

He biked 4 km in 6 mins.

d. On the graph, find the slope of each of the other three lines.

② Line A: $\frac{\text{rise}}{\text{run}} = \frac{4 \text{ km}}{6 \text{ min}} = \frac{2}{3}$

① Line B: $\frac{3 \text{ km}}{3 \text{ min}} = 1$

② Line C: $\frac{2 \text{ km}}{3 \text{ min}} = \frac{2}{3}$

③ Line D: $\frac{2 \text{ km}}{4 \text{ min}} = \frac{1}{2}$

e. Did the slopes in part (c) confirm your ranking from slowest to fastest in part (a)? If not, review your slopes and your comparison of rates based on the graph to find any mistakes.

f. Write down the **mathematical definition of slope**.

the measurement of the steepness of a line

