

Monday April 18,2011

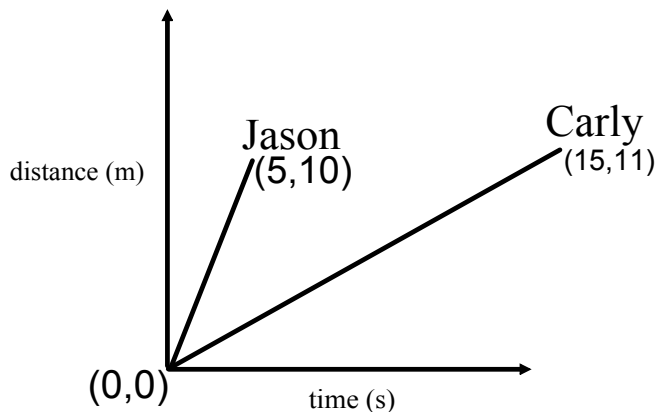
answers pg 365 #2,3,5,6

graphing velocity lab

Reminder Test Thursday Chp 9

Warm -Up

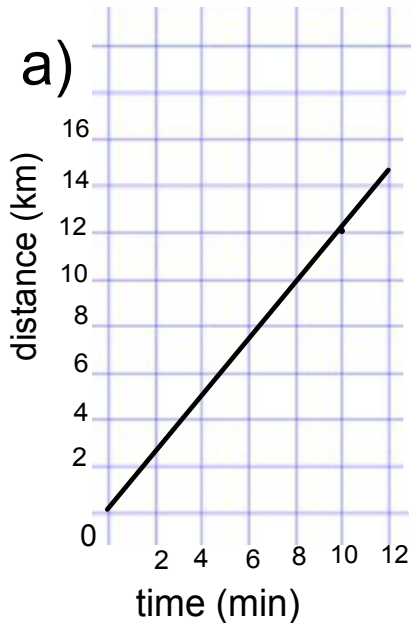
1. After looking at the following graph answer these questions:
 - a. From looking at the graph who travelled faster?
 - b. Calculate Jason and Carly's speed.



pg 365 #2,3,5,6

2. The slope of a distance-time graph represents the speed of an object.
3.
 - a) a steep slope indicates that the car has a high speed.
 - b) a shallow or less steep slope indicates that the car has a lower speed
 - c) a zero slope indicates that the car is not moving.
 - d) A short straight line on the graph indicates that the car maintained a uniform speed for a short period of time.
 - e) a long straight line on the graph indicates that the car maintained a uniform speed for a long period of time.

5. a)



b) The distance travelled at the end of 5.0 min is 6.0km

c) The time required to cross the 12.9km bridge is ~10.8 min

d) the speed was constant, because the car travelled equal distances in equal time intervals.

e) slope = $\frac{y_2 - y_1}{x_2 - x_1}$
 $= \frac{12 - 4.8}{10 - 4}$
 $= \frac{7.2 \text{ km}}{6 \text{ min}} = 1.2 \text{ km/min}$

slope represents speed

f) $1.2 \frac{\text{km}}{\text{min}} \times \frac{60 \text{ min}}{1 \text{ hr}} = 72 \text{ km/h}$

6. a) Jerry has the greater speed

b) $v_{\text{Jerry}} = \frac{180 \text{ m} - 60 \text{ m}}{15 \text{ s} - 5 \text{ s}}$
 $= \frac{120 \text{ m}}{10 \text{ s}} = 12 \text{ m/s}$

$v_{\text{Tom}} = \frac{90 \text{ m} - 30 \text{ m}}{15 \text{ s} - 5 \text{ s}}$
 $= \frac{60 \text{ m}}{10 \text{ s}} = 6 \text{ m/s}$

yes this matches my answer in (a)

c) if a rider stopped the graph would become a horizontal line

Motion Lab

Attachments

average speed ex 1.notebook

average speed ex 2 answers.notebook