

pg 365 #1,2,6

1. A graph is sometimes more useful than an equation because it is a visual representation of the speed. It allows you to see the relationships between the two variables easily.

2. The slope of a distance-time graph represents the speed of an object.

6-a) Jerry has the greater speed

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

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

yes this matches my answer in (a)

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