

Monday May 9, 2011

Pass in Case Studies

Chapter 10 Review

Test Wednesday!!!

Warm-Up

1. A roller coaster car rapidly picks up speed as it rolls down a slope. As it starts down the slope, its speed is 4 m/s. But 3 seconds later, at the bottom of the slope, its speed is 22 m/s. What is its average acceleration?

2. If a Ferrari, with an initial velocity of 10 m/s, accelerates at a rate of 50 m/s/s for 3 seconds, what will its final velocity be?

Review Chapter 10

Acceleration is the change in speed over time.

There are 3 types of acceleration:

Constant

Instantaneous

Average

Formulas (will be provided)

$$a = \frac{v_2 - v_1}{t_2 - t_1} \quad t = \frac{v_2 - v_1}{a} \quad v_1 = v_2 - at \quad d_{\text{square}} = vt$$
$$v_2 = v_1 + at \quad d_{\text{triangle}} = \frac{1}{2}vt$$

Graphing:

The line on a velocity vs time graph represents acceleration.

To find acceleration from a graph find the slope of the line.

To find distance from a graph calculate the area under the graph.

Complete Review Sheet Chapter 10

ASK QUESTIONS IF YOU DO NOT
UNDERSTAND!!!!!!

Test Chapter 10 Wednesday!!!

Attachments

Answers Science 10 Chapter 10 review.notebook