

If you would like the opportunity to retake the two dimensional motion test, you must first turn in the following problems.

Chapter 3

#12, 15-17, 21-24, 26-33, 35, 38, 39, 41 & 45

The problems must be completed in the manner described below. The work must be neat and easy for me to read.

If I find your work acceptable you will be given the opportunity for a retake.

$x_0 = 0 \text{ m}$

$y_0 =$

$x = 10 \text{ m}$

$y =$

$v_{ox} = 3 \frac{\text{m}}{\text{s}}$

$v_{oy} = 4 \frac{\text{m}}{\text{s}}$

1) Fill in the table with all the known information.

$v_o =$

$v_x =$

$v_y =$

$v = 12 \frac{\text{m}}{\text{s}} \text{ } 30^\circ \text{ Above Horiz}$

$a_x = 0$

$a_y =$

2) Draw boxes around information that you decide to calculate

$\Delta t = 3.3 \text{ s}$

$\Delta t =$

3) Show all calculations and draw boxes around information that you calculated.

All numbers must have units.

All equations must have = signs.

$$\cos 30^\circ = \frac{V_x}{12 \frac{\text{m}}{\text{s}}}$$

$$V_x = 10.4 \frac{\text{m}}{\text{s}}$$

$$x = x_0 + v_0 \Delta t + \frac{1}{2} a \Delta t^2$$

$$10 \text{ m} = 0 \text{ m} + 3 \frac{\text{m}}{\text{s}} \Delta t + 0$$

$$\Delta t = 3.3 \text{ s}$$