

Name _____

How to Write Up a Problem

Every problem writeup needs three things:

- 1) Inventory of variables
- 2) Formula in **letters**
- 3) Numbers subbed in, answer with units

A car's speed increases from 20 m/s to 30 m/s in 2 sec. Compute the car's acceleration.

Solution:

First, list the variables with a unit for each number.

$$v_o = 20 \text{ m/s}$$

$$v_f = 30 \text{ m/s}$$

$$\Delta t = 2 \text{ s}$$

Next, write the equation in letters first. Then substitute numbers. Circle the answer.

$$a = \frac{\Delta v}{\Delta t}$$

$$a = \frac{v_f - v_o}{\Delta t}$$

$$a = \frac{30 - 20}{2}$$

$$a = 5 \text{ (m/s) / s}$$