

## Warm Up

If a Ferrari, with an initial speed of 10.0 m/s, accelerates at a rate of 15.0 m/s<sup>2</sup> for 3.00 seconds, what will be the car's final speed?

$$v_1 = 10.0 \text{ m/s}$$

$$a = 15.0 \text{ m/s}^2$$

$$\Delta t = 3.00 \text{ s}$$

$$v_2 = ?$$

$$v_2 = v_1 + a \Delta t$$

$$v_2 = (10.0 \text{ m/s}) + (15.0 \text{ m/s}^2)(3.00 \text{ s})$$

$$v_2 = 10.0 \text{ m/s} + 45.0 \text{ m/s}$$

$$v_2 = 55.0 \text{ m/s}$$

- Significant Figures
- Speed/Distance/Time Problems
- Speed/Distance/Time Graphs
- Acceleration problems

0.300

45 (2)

0.00003

0.03 (1)

707 (3)

7070 (3)

7070. (4)

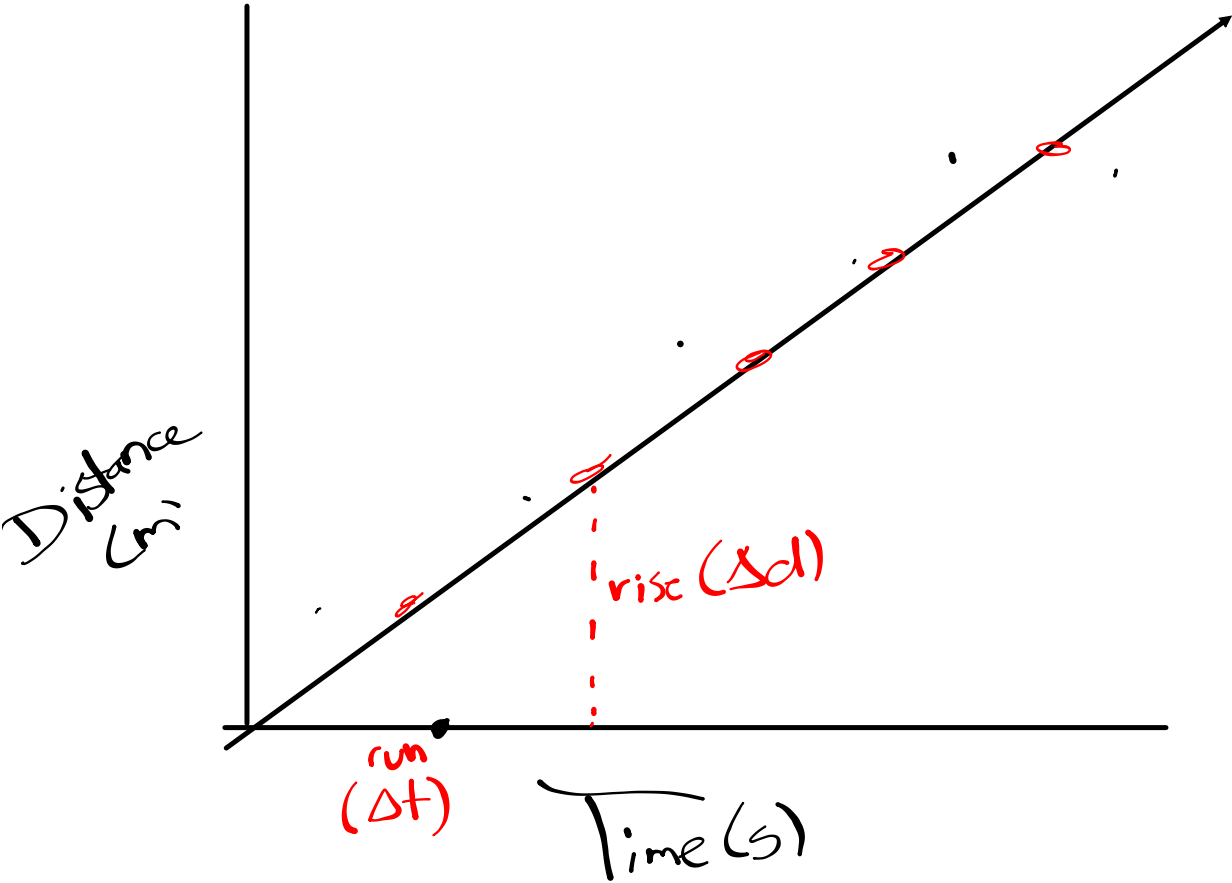
$$11.3 + 2.48 = 13.78$$

13.8

$$\begin{matrix} (2) & (3) \\ 3.0 \times 2.65 = \end{matrix} \underline{\underline{8.0}}$$

7070.000

7.95



# Review Worksheet