

SIGNIFICANT DIGITS - Used with measurements

$$2.378 \text{ m} * 5.42 \text{ m} = 12.88876 \text{ m}^2$$

1) All nonzero digits are significant.

$$\underline{360,000} \text{ m} \quad 2$$

2) Zeros between 2 sig. digits are significant

$$0.000\underline{793} \text{ cm} \quad 3$$

3) Zeros at the end of a decimal fraction are significant.

$$0.00\underline{730} \text{ cm} \quad 3$$

4) Mult./Div = Round to the smallest # of sig. digits in the original measurements

$$\underline{860.03} \text{ ft} \quad 5$$

$$\underline{7000.0} \text{ m} \quad 5$$

$$\begin{aligned} 7.2 \text{ ft} \times 3.65 \text{ ft} &= \\ &= 26.28 \text{ ft}^2 \\ &= \underline{26 \text{ ft}^2} \end{aligned}$$

$$\begin{aligned} &\text{Round to 3 sig. dig.} \\ &\underline{72645} \text{ m} \\ &72,600 \text{ m} \end{aligned}$$

$$A = \frac{1}{2} b h$$

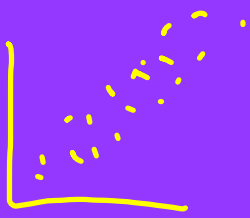
$$\begin{aligned} A &= 0.5 (12,000 \text{ ft}) (26,440 \text{ ft.}) \\ &= 158,640,000 \text{ ft}^2 \\ &= 160,000,000 \text{ ft}^2 \end{aligned}$$

5/ Add & Subtr. = Use the smallest # of decimal places
in the original measurements.

$$\begin{array}{r} 7.2 \text{ ft} \\ + 3.65 \text{ ft} \\ \hline 10.85 \\ 10.9 \text{ ft.} \end{array}$$

Unit Conversion Change to $\frac{\text{mi}}{\text{h}}$

$$240 \frac{\text{ft}}{\text{sec}} \cdot \frac{3600 \text{ sec}}{1 \text{ h}} \cdot \frac{1 \text{ mi}}{5280 \text{ ft}}$$
$$= \frac{240 \cdot 3600}{5280} \frac{\text{mi}}{\text{h}}$$
$$= 86400 \frac{\text{mi}}{\text{h}} = 163.6363$$
$$\approx 160 \frac{\text{mi}}{\text{h}}$$



positive
correlation

Variables move
in same direction
When $x \uparrow$, $y \uparrow$
When $x \downarrow$, $y \downarrow$



negative
correlation

Variables move
in opposite
directions
When $x \uparrow$, $y \downarrow$.



no
correlation

Scatter plots on calculator.

Enter data.

- 1) Create new document - #4 Lists + Spreadsheets.
- 2) Name columns
- 3) Enter data

Create Scatter plot

- 1) Add new page Ctrl- Doc.
- 2) Make #5 Data + Statistics page
- 3) Move cursor to bottom of page +
Click to select x-axis variable
- 4) Do same for y-axis

Scale Graph

- 1) Menu - #5 Window/Zoom - #1 Window Settings
- 2) Make changes to max + min values for each axis.