



$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$= \frac{12.0 - 4.0}{15.0 - 5.0} = \frac{8.0}{10.0}$$

$$= .80$$

Collect Data

- 1) mass + volume of pennies
- 2) wire: mass + length (height)

Calculations

- 1) Graph mass v. volume
Calculate Density

- 2) Use slope (Density) to
calculate vol. of wire.

$$D = \frac{m}{V}$$

- 3) $V = \pi r^2 h$ solve for r

- 4) diam. = $2r$