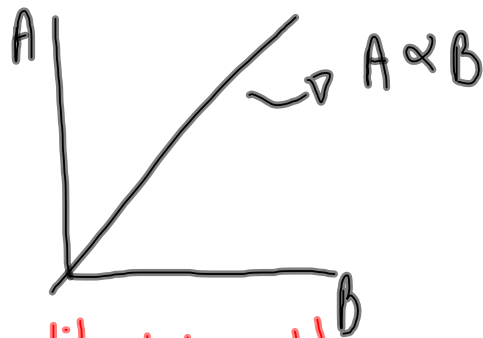
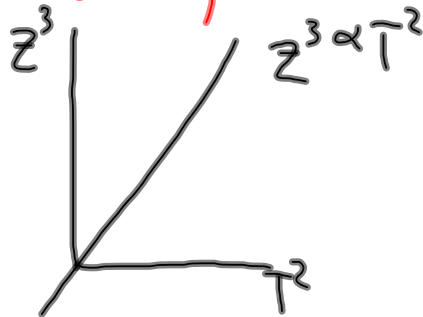
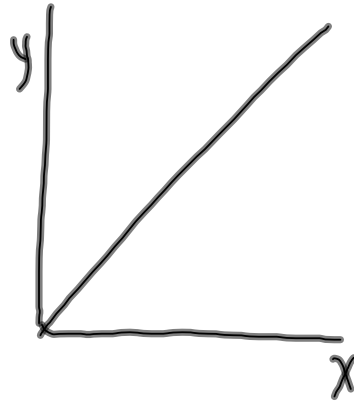


# Proportionalities

$$y \propto x$$

↓  
∝

"is proportional to"  
"varies directly with"



$y \propto x$  (proportionality statement)

$y = kx$  (general equation)

↑  
proportionality constant

$(y = mx + b)$

$k = \frac{y}{x}$  (solve for k)

$k = \frac{30}{3}$

$k = 10$

$y = 10x$  (specific equation)

## QUIZ - Thurs, Sept 16th

- Graphing linear data
  - plot  $y$  vs  $x$
  - title
  - axes labelled + units
  - good scale
  - $(0,0)$
  - LOBF
- find equation for LOBF
- use equation or graph to predict
- interpolation/extrapolation