

# Ripple Tank

Does  $v = f\lambda$ ?

If  $f$  fixed, then  $v \propto \lambda$

$\lambda / \text{cm}$	distance / cm	time / s	velocity / cm/s
1.8	10.0	6.24	1.60

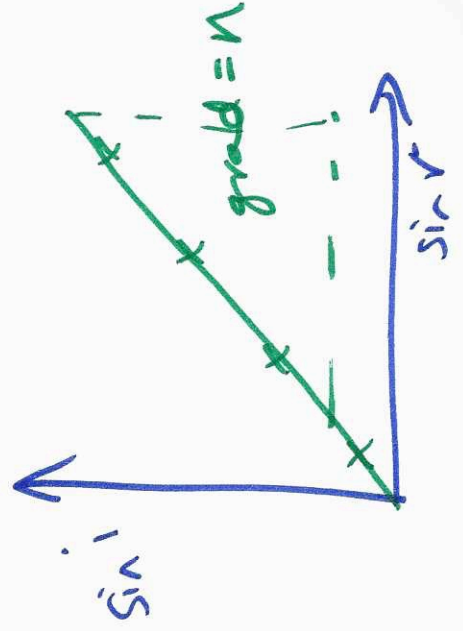
# Investigating refraction

$$n = \frac{\sin i}{\sin r}$$

eg. mystery substance B.

$i / ^\circ$	$r / ^\circ$	$\sin i$	$\sin r$	$n = \frac{\sin i}{\sin r}$
10	6	0.174	0.105	1.66
20				
30				
...				

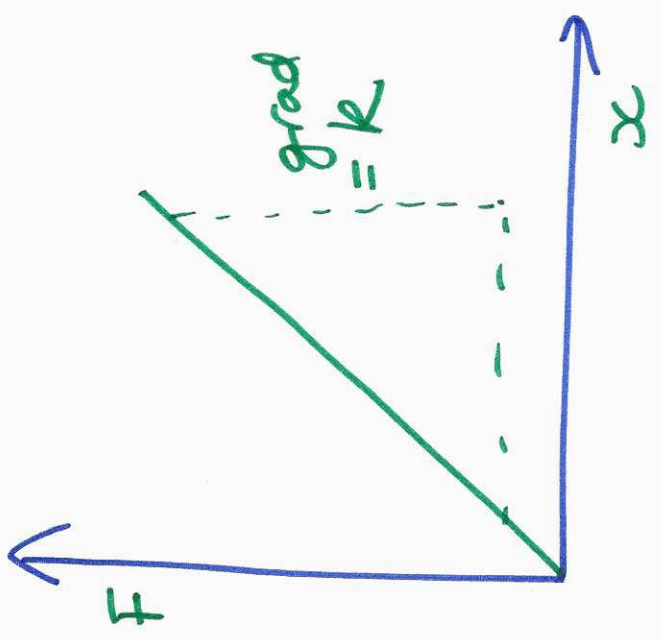
OR:



$f$  should be  $\propto x$

# Hooke's law (springs)

$m / \text{kg}$	$F / \text{N}$	$x / \text{mm}$
0.100	0.980	17
0.150	1.500	20
...	...	...



$R$  should be  $\propto l$

## Resistance vs. length

Type: Gold

X-sec. diameter: 0.4 mm

length / m	resistance / $\Omega$
6.0	1.49
7.9	1.97
...	...

