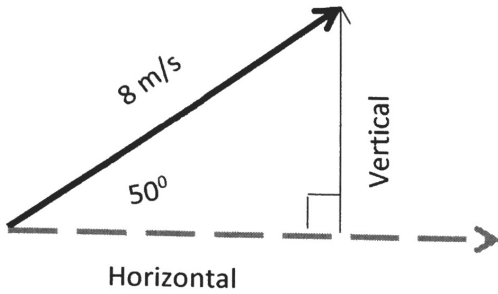


Component Vectors:

Any vector can be broken into two component vectors: one horizontal and one vertical.

Example:



Horizontal component vector

$$\cos 50^\circ = \text{horizontal} / 8\text{m/s}$$

$$\text{Horizontal} = (8\text{m/s})(\cos 50^\circ) = 5.14 \text{ m/s}$$

Vertical Component vector

$$\sin 50^\circ = \text{vertical} / 8\text{m/s}$$

$$\text{Vertical} = (8\text{m/s})(\sin 50^\circ) = 6.13\text{m/s}$$

Formulas:

Horizontal:

Vertical:

You try:

