



y is inversely proportional to the cube of x .

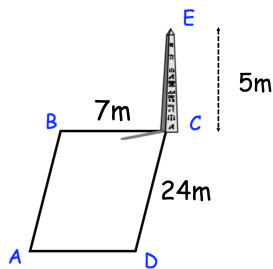
If $y = 4$, $x = 2$.

Find y when $x = 1$.

The density of liquid A is 0.86g/cm^3
The density of liquid B is 1.04g/cm^3

20 litres of liquid A is mixed with 50 litres of liquid B to make liquid C.

Work out the density of liquid C.

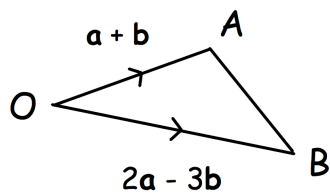


*Sketch drawn from 3D perspective

An obelisk is situated in the corner of rectangular field ABCD.
Calculate the distance AE

Simplify

$$\frac{x^2 + 10x + 24}{x^2 - 36}$$



The vector \vec{DE} is parallel to \vec{BA} .
 \vec{DE} is twice the length of \vec{BA}

Write down vector \vec{DE} in terms of \mathbf{a} and \mathbf{b} .