

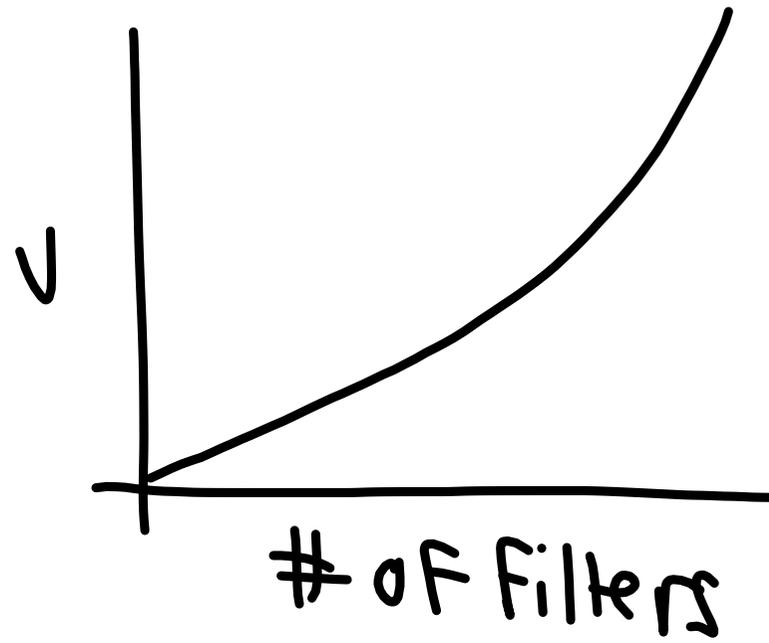
$$-mg = bv^n$$

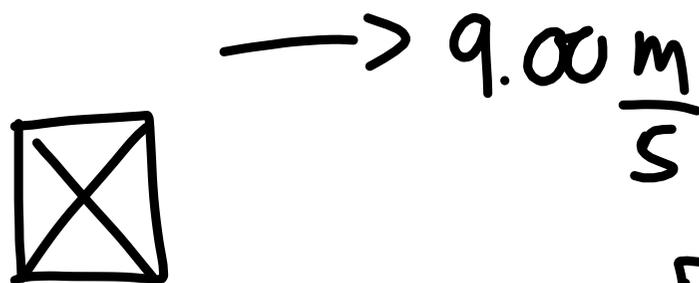
$$\log\left(\frac{-mg}{b}\right) = \log(v^n)$$

$$\log\left(\frac{-mg}{b}\right) = n \log(v)$$

$$\log(v) = \frac{1}{n} \log\left(\frac{-mg}{b}\right) \rightarrow \frac{1}{2} A C_D P$$

$y = m x$





$$m = 2.00 \text{ kg}$$

$$F = ma$$

$$6.00t^2 = (2.00)a$$

$$3.00t^2 = a$$

$$a(t) = 3.00t^2$$

$$F = ma$$

$$F_A = -6.00t^2 \frac{\text{N}}{\text{s}^2}$$

$$v(t) = \frac{-3.00t^3}{3} =$$

$$v(t) = -t^3 + 9.00$$

$$V(t) = -t^3 + 9.00$$

$$X(t) = -\frac{t^4}{4} + \frac{9.00t^1}{1} + C$$

$$X(t) = -\frac{t^4}{4} + 9.00t$$

$$0 = t^3 + 9.00$$

↳ graph, Find $t = \boxed{2.08 \text{ s}}$
 $d = 23.4 \text{ m}$