

Challenge2

Distance modulus formula

$$M = m + 5 - 5\log(d)$$

$$5\log(d) = m - M + 5$$

$$\log(d) = \frac{m - M + 5}{5}$$

$$d = 10^{\left(\frac{m - M + 5}{5}\right)}$$

M : absolute magnitude

m : apparent magnitude

d : distance

Recession velocity formula

$$v = zc$$

v : recession velocity

z : redshift

c : speed of light