

$$1 \text{ a) required ratio} = \frac{15^1}{30^2} \\ = 1:2$$

$$\text{b) required ratio} = \frac{5^1}{10^2} \\ = 1:2$$

$$\text{c) required ratio} = \frac{50}{5 \times 100^2} \\ = 1:10$$

$$2 \text{ a) required percentage} = \frac{3}{4} \times 100^{25} \\ = 75$$

$$\text{b) required percentage} = \frac{2}{3} \times 100 \\ = \frac{200}{3} \\ = 66\frac{2}{3}$$

$$3. \text{ no. of students good in mathematics} \\ = \frac{72^{18}}{100^4} \times 25 \\ = 18$$

$$\text{no. of students not good in Maths} = 25 - 18 \\ = 7$$