

Question No 3:

Two numbers are in the ratio 3:4. If 6 is added to each term of the ratio, there is increase of 20-percent in the given ratio. Find the first and second number.

Solⁿ: Let First number be = x

|| Second number be = $4x$

Now Parts = $3+4 = 7$

$$3x : 4x$$

According to question

$$3x+6 = 4x+6 = 20$$

$$= \frac{3x(20)+6}{7} = \frac{4x(20)+6}{7}$$

$$= \frac{60x+6}{7} = \frac{80x+6}{7}$$

$$= 60x - 80x = 6-6$$

$$= \frac{60x - 80x}{7} = 0$$

$$= \frac{20x}{7} = 0$$

$$= 20x = 7$$

$$= x = 7 \times 20$$

$$= x = 140$$

$$= 3x : 4x$$

$$= 3(140) : 4(140)$$

$$= 420 : 560$$

$$= \frac{420}{560}$$

$$= \frac{3}{4}$$

$$= \frac{3}{4} (3,4)$$

Hence ~~the~~ First no is "3" and Second no is "4".

Practice Problems

Example no 10 / Question 1:

In a class, the number of boys is more than the number of girls by 12% of the total strength of the class. Find the ratio of boys to girls.