

$$a:b = 5:4 \quad b:c = 7:3$$

$$\frac{b}{a} = \frac{4}{5}, \quad \frac{b}{c} = \frac{7}{3}$$

Lcm of numerators

$$\frac{b}{a} = \left(\frac{4 \times 7}{5} \right), \quad \frac{b}{c} = \left(\frac{7 \times 4}{3} \right)$$

$$\frac{b}{a} = \frac{28}{5}, \quad \frac{b}{c} = \frac{28}{3}$$

$$b:a = 28:5 \quad b:c = 28:3$$

b is now the same.

$$a:b:c = 5:28:3$$

$$a:b:c = 5:28:3$$