

Ques If $x:y = 2:3$ & $y:z = 4:7$, find $x:z$.

Ans: given that $\frac{x}{y} = \frac{2}{3}$

$$y = \frac{3x}{2}$$

and $y:z = 4:7$

$$\Rightarrow \frac{3x}{2} : z = 4 : 7$$

$$\Rightarrow \frac{3x/2}{z} = \frac{4}{7}$$

$$\Rightarrow \frac{3x}{2z} = \frac{4}{7}$$

$$\Rightarrow \frac{x}{z} = \frac{8}{21}$$

$$\therefore x:z = 8:21 \quad \text{Ans:}$$