Ex-11.A

Q1: ans i) $\frac{42}{63} = \frac{2}{3}$

ans ii) $\frac{48}{54} \frac{24}{27} = \frac{24}{27} \frac{8}{9} = \frac{8}{9}$

ans iii) $\frac{200}{250} \frac{100}{12} \frac{200}{250} = \frac{20}{25} \frac{4}{5} = \frac{4}{5}$

Q2: ans i) 5 kg = 5000 g

$\Rightarrow$ 800 g

$\Rightarrow$ 5000 g : 800 g  5000 ÷ 800

$\Rightarrow$ 4,200 g  8 ) 5,000  $\frac{50}{2}\frac{25}{4}$

$\Rightarrow$ $\frac{25}{4}$ = 25 : 4

ans ii) 2m = 200 cm

$\Rightarrow$ 30 cm

$\Rightarrow$ 200 ÷ 30  $\frac{20}{2}\frac{3}{0}$

$\Rightarrow$ $\frac{20}{2}\frac{3}{0}$

$\Rightarrow$ 3:20

ans iii) 3m = 300 cm

$\Rightarrow$ 90 cm

$\Rightarrow$ $\frac{300}{90}$

$\Rightarrow$ $\frac{30}{9}\frac{10}{3}$

$\Rightarrow$ $\frac{10}{3}$ = 10:3

ans iv) 2 yrs = 24 months

9 months

$\frac{24}{9}\frac{8}{3}$ = $\frac{8}{3}$ = 8:3

ans v) 1 hr = 60 min

$\Rightarrow$ 45 min

$\Rightarrow$ $\frac{60}{45}\frac{12}{9}$ = $\frac{12}{9}$

$\Rightarrow$ 12:9

ans vi) 4 min = 240 sec

$\Rightarrow$ 45 sec

$\Rightarrow$ $\frac{240}{45}\frac{48}{9}$ = $\frac{48}{9}\frac{16}{3}$ = $\frac{16}{3}$

$\Rightarrow$ 16:3

Q3: ans i) $\frac{3}{2} \div \frac{5}{2}$

$\Rightarrow$ $\frac{3}{2} \times \frac{2}{5}$

$\Rightarrow$ $\frac{3}{5}$

$\Rightarrow$ 3:5

ans ii) $\frac{7}{2} : 7$

$\Rightarrow$ $\frac{7}{2} : \frac{7}{1}$

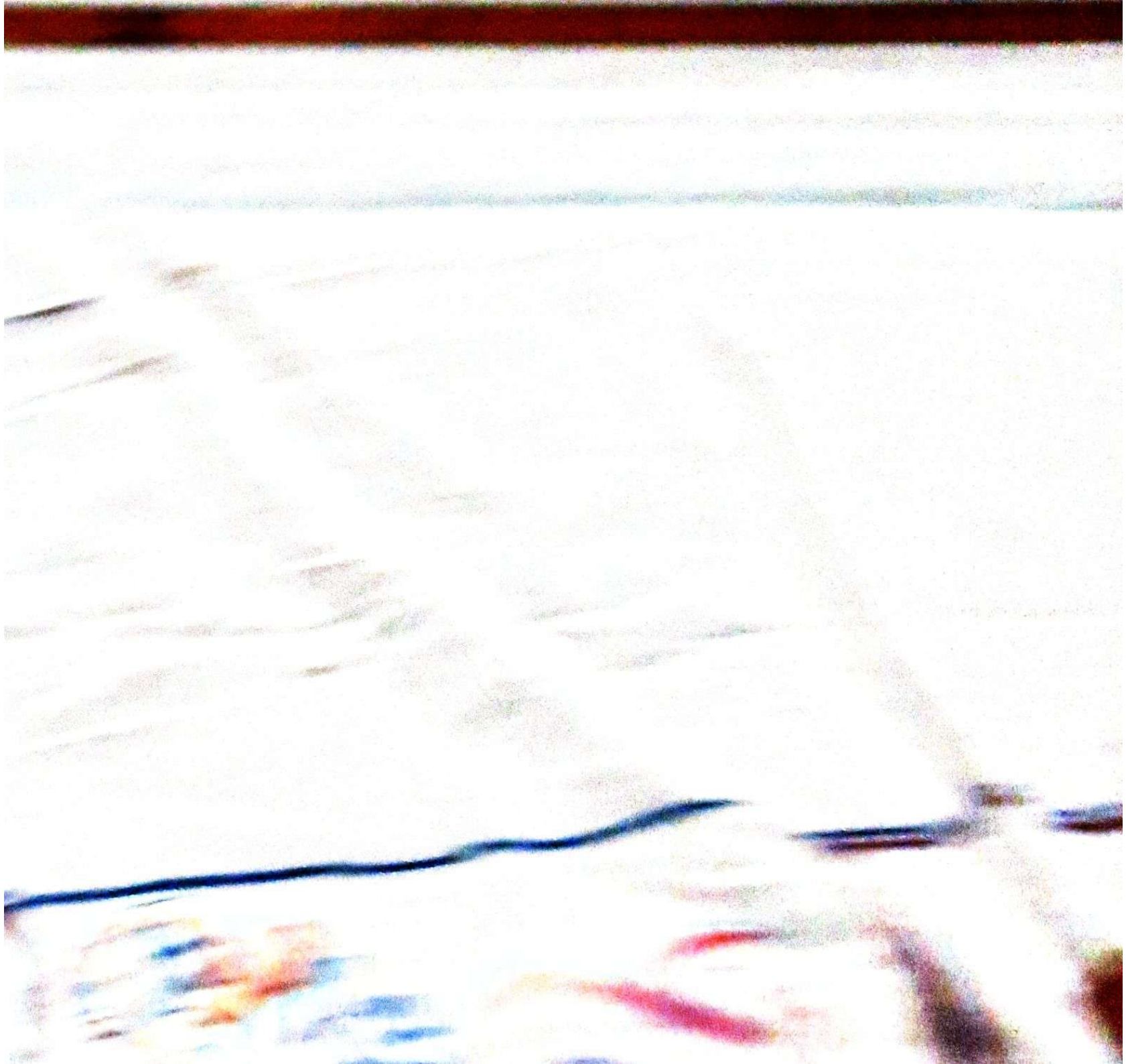
$\Rightarrow$ $\frac{7}{2} \times \frac{1}{7}$

$\Rightarrow$ $\frac{1}{2}$

ans iii) $\frac{7}{3} : \frac{7}{2} : \frac{5}{4}$

$\Rightarrow$ $\frac{7}{3} \times \frac{2}{7} \times \frac{4}{5}$  $\Rightarrow$ $\frac{2}{3} \times \frac{4}{5}$  2 | 3, 2, 4 / 3, 1, 2

L.C.M = 2 × 2 × 3 = 12



$\Rightarrow \frac{7}{\cancel{7}} \times \frac{\cancel{12}^{4}}{3} : \frac{7}{2} \times \frac{\cancel{12}^{6}}{4} : \frac{5}{4} \times \frac{\cancel{12}^{3}}{4}$

$\Rightarrow 28:42:15$

iv) $\frac{x^{8}}{\cancel{4}x} \cdot \frac{x}{\cancel{4}}$

$\Rightarrow \frac{x}{4}$

v) $\frac{25}{10} : \frac{15}{10}$

$\Rightarrow \frac{\cancel{25}^{5} \times \cancel{10}}{\cancel{10}\ \cancel{15}\ 3} = \frac{5}{3}$

$\Rightarrow 5:3$

vi) $\frac{25}{10} : \frac{5}{1}$

$\Rightarrow \frac{\cancel{25}^{5}}{10} \times \frac{1}{\cancel{5}\ 1}$

$\Rightarrow \frac{\cancel{5}^{1}}{\cancel{10}2} \times \frac{1}{1} = \frac{1}{2}$

$\Rightarrow 1:2$

A2. Length of the field = 80 m
Width of the field = 60 m

The ratio of the width to its length is $= \frac{\cancel{60}}{\cancel{80}} = \frac{3}{4}$

The ratio of the width to its length is 3:4.

ans i) F

ans ii) T

ans iii) T

A4. Yes

A5. Yes

A6. 3.5m = [illegible] cm

⇒ 475 cm = 4.75 m

⇒ 2.8 m = [illegible] cm

$$\Rightarrow \frac{35}{10} : \frac{475}{100} : \frac{28}{10} = \frac{35}{10} : \frac{19}{4} : \frac{28}{10}$$

$$\Rightarrow \text{L.C.M} = 20$$

$$\Rightarrow \frac{35}{10} \times 20^{2} : \frac{19}{4} \times 20^{5} : \frac{28}{10} \times 20^{2}$$

$$\Rightarrow 70 : 95 : 56$$

A7. 5 dozen = 12 × 5 = 60

2 scores = 2 × 20 = 40

Ratio between 5 dozens and 2 scores = $\frac{60}{40}$ or $60^{3} : 40^{2}$

Ratio = 3 : 2