

Date : 09.17.18

Unit 02 Practice Assessment :

$$\frac{a}{b} + \frac{c}{b} = \frac{a+c}{b}$$

where, $b \neq 0$

$$\frac{a}{b} - \frac{c}{b} = \frac{a-c}{b}$$

$$\# \frac{5}{6} + \frac{4}{6} = \frac{5+4}{6} = \frac{9}{6} = \frac{3}{2}$$

$$\# \frac{7}{6} - \frac{5}{6} = \frac{7-5}{6} = \frac{2}{6} = \frac{1}{3}$$

$$\# \frac{1}{18} + \frac{1}{12}$$

$$= \frac{1}{18} \cdot \frac{2}{2} + \frac{1}{12} \cdot \frac{3}{3}$$

~~L.C.M~~

$$= \frac{2}{36} + \frac{3}{36}$$

$$= \frac{5}{36}$$

L.C.M

$$18 = 2 \cdot \underline{3} \cdot \underline{3} \cdot 2$$
$$\wedge = 36$$

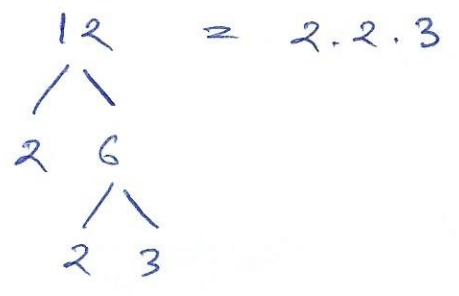
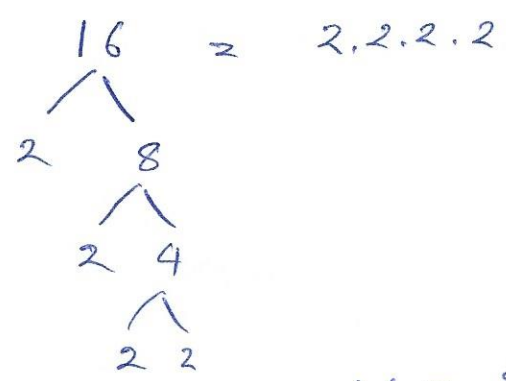
$$2 \quad 9$$
$$\wedge$$
$$3 \quad 3$$

$$12 = \underline{2} \cdot \underline{2} \cdot \underline{3} \cdot 3$$
$$\wedge = 36$$

$$2 \quad 6$$

$$\wedge$$
$$2 \quad 3$$

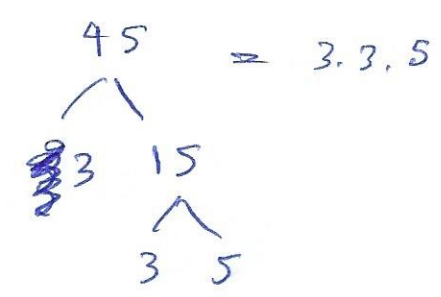
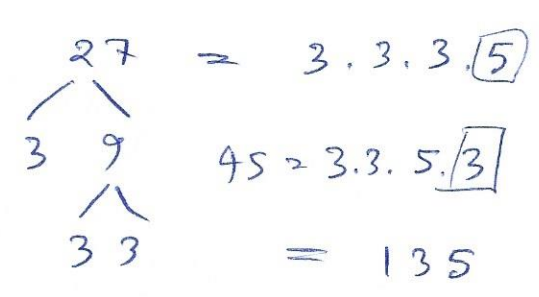
15 16 and 12
L.C.M ??
= CD



$$\begin{aligned}
 16 &= \underline{2} \cdot \underline{2} \cdot 2 \cdot 2 \cdot 3 = 48 \\
 12 &= \underline{2} \cdot \underline{2} \cdot 3 \cdot 2 \cdot 2 = 48
 \end{aligned}$$

L.C.M = 48

20 27 & 45



$$\begin{aligned}
 45 &= 3 \cdot 3 \cdot 5 \cdot \boxed{3} \\
 &= 135
 \end{aligned}$$

L.C.M = CD = 135

↓ common denominator.

30. 21, 35, 50, 75

$$21 = 3 \cdot 7$$

$$\begin{array}{c} \wedge \\ 3 \quad 7 \end{array}$$

$$35 = 5 \cdot 7$$

$$\begin{array}{c} \wedge \\ 5 \quad 7 \end{array}$$

$$50 = 2 \cdot 5 \cdot 5$$

$$\begin{array}{c} \wedge \\ 2 \quad 25 \\ \wedge \\ 5 \quad 5 \end{array}$$

$$75 = 3 \cdot 5 \cdot 5$$

$$\begin{array}{c} \wedge \\ 3 \quad 25 \\ \wedge \\ 5 \quad 5 \end{array}$$

$$21 = 3 \cdot 7 \cdot 5 \cdot 5 \cdot 2$$

$$35 = 5 \cdot 7 \cdot 5 \cdot 3 \cdot 2$$

$$50 = 2 \cdot 5 \cdot 5 \cdot 7 \cdot 3$$

$$75 = 3 \cdot 5 \cdot 5 \cdot 7 \cdot 2$$

1050

$$L.C.M = C.D = 1050$$

$$1. \quad \frac{2}{9} + \frac{5}{9} + \frac{8}{9}$$

$$= \frac{2+5+8}{9} = \frac{15}{9} = \frac{5}{3}$$

$$2. \quad \frac{4}{11} + \frac{7}{11} + \frac{5}{11}$$

$$= \frac{16}{11}$$

$$3. \quad \frac{11}{6} - \frac{3}{6}$$

$$= \frac{11-3}{6} = \frac{8}{6} = \frac{4}{3}$$

$$4. \quad \frac{7}{15} - \frac{4}{15}$$

$$= \frac{3}{15}$$

$$= \frac{1}{5}$$

5. $12 = 2 \cdot 2 \cdot 3 \cdot 3$ $18 = 2 \cdot 3 \cdot 3$
 \wedge
 26 $18 = 2 \cdot 3 \cdot 3 \cdot 2$
 \wedge
 23 $= 36$
 \wedge
 33
 L.C.M = 36

7. $9 \neq 24$

$9 = 3 \cdot 3$
 \wedge
 33
 $24 = 2 \cdot 2 \cdot 2 \cdot 3 \cdot 3$
 $9 = 3 \cdot 3 \cdot 2 \cdot 2 \cdot 2$
 $= 72$ (L.C.M)

$24 = 2 \cdot 2 \cdot 2 \cdot 3$
 \wedge
 212
 \wedge
 26
 \wedge
 23

10. $14 = 2 \cdot 7$ | $12 = 2 \cdot 2 \cdot 3$ | $21 = 3 \cdot 7$ | $28 = 2 \cdot 2 \cdot 7$
 \wedge | \wedge | \wedge | \wedge
 27 | 26 | 37 | 214
 \wedge | \wedge | | \wedge
 23 | 23 | | 27

$14 = 2 \cdot 7 \cdot 2 \cdot 3$
 $12 = 2 \cdot 2 \cdot 3 \cdot 7$
 $21 = 3 \cdot 7 \cdot 2 \cdot 2$
 $28 = 2 \cdot 2 \cdot 7 \cdot 3$ } 84 (L.C.M)

Book

20. $\frac{19}{6} - \frac{11}{6} + \frac{5}{6}$

$= \frac{19 - 11 + 5}{6}$

$= \frac{13}{6}$

28. $\frac{a}{9x} + \frac{5a}{9x} = \frac{6a}{9x} = \frac{2a}{3x}$

32. $\frac{5}{6} + \frac{3}{8}$

$= \frac{20 + 9}{24}$

$= \frac{29}{24}$

6 = 2 · 3 · 2 · 2

8 = 2 · 2 · 2 · 2 = 24

52. $\frac{7}{12} - \frac{2}{15} + \frac{5}{18}$

12 = 2 · 2 · 3 · 3 · 5

15 = 3 · 5 · 2 · 2 · 3

18 = 2 · 3 · 3 · 2 · 5

= 180

~~$= \frac{7}{12} \cdot \frac{180}{180} - \frac{2}{15} \cdot \frac{180}{180} + \frac{5}{18} \cdot \frac{180}{180}$~~

$= \frac{(7 \cdot 15) - 2(12) + 5(10)}{180}$

$= \frac{105 - 24 + 50}{180} = \frac{131}{180}$

$$55. \frac{1}{2} + \frac{1}{4} - \frac{1}{8} - \frac{1}{16}$$

$$= \frac{8 + 4 - 2 - 1}{16}$$

$$= \frac{9}{16}$$

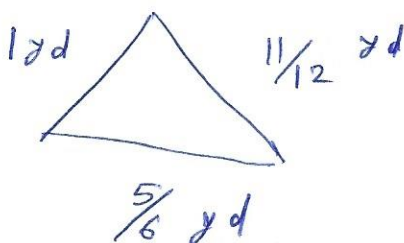
$$2 = 2 \cdot 1$$

$$4 = 2 \cdot 2$$

$$8 = 2 \cdot 2 \cdot 2$$

$$16 = 2 \cdot 2 \cdot 2 \cdot 2$$

#



$$1 + \frac{11}{12} + \frac{5}{6}$$

$$= \frac{12 + 11 + 10}{12}$$

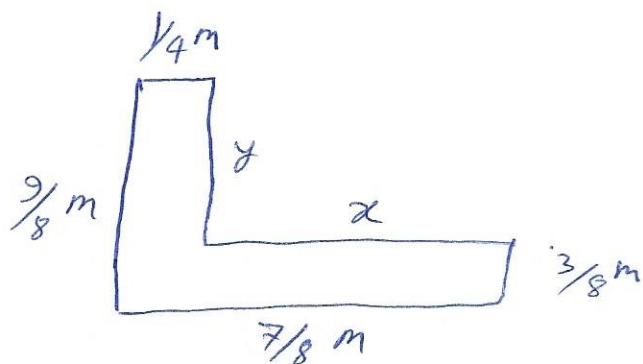
$$= \frac{33}{12} = 2\frac{11}{4} \text{ yd}$$

$$12 = 2 \cdot 2 \cdot 3$$

$$\begin{array}{c} 12 \\ \wedge \\ 2 \ 6 \\ \wedge \\ 2 \ 3 \end{array}$$

$$6 = 2 \cdot 3 \cdot \boxed{2}$$

#



$$x = \frac{7}{8} - \frac{1}{4} = \frac{7-2}{8} = \frac{5}{8}$$

$$y = \frac{9}{8} - \frac{3}{8}$$

$$= \frac{6}{8} = \frac{3}{4}$$

~~$$P = \frac{9}{8} + \frac{1}{4} + \frac{3}{4} + \frac{5}{8} + \frac{3}{8} + \frac{7}{8}$$~~

$$P = \frac{9}{8} + \frac{1}{4} + \frac{3}{4} + \frac{5}{8} + \frac{3}{8} + \frac{7}{8}$$

$$P = \frac{9+2+6+5+3+7}{8}$$

$$= \frac{32}{8}$$

$$= 4$$