

Practice Assessment, Unit 2

$$1) \frac{2}{9} + \frac{5}{9} + \frac{8}{9}$$

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

$$= \frac{15}{9}$$

$$= \frac{\cancel{3} \cdot 5}{\cancel{3} \cdot 3}$$

$$= \frac{5}{3}$$

$$3) \frac{11}{6} - \frac{3}{6}$$

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

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

$$= \frac{\cancel{2} \cdot \cancel{2} \cdot 2}{\cancel{2} \cdot 3}$$

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

$$2) \frac{4}{11} + \frac{7}{11} + \frac{5}{11}$$

$$= \frac{4+7+5}{11}$$

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

$$4) \frac{7}{15} - \frac{4}{15}$$

$$= \frac{7-4}{15}$$

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

$$= \frac{1 \cdot \cancel{3}}{\cancel{3} \cdot 5}$$

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

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

where, a, b & c
are whole #s,

$$b \neq 0$$

$$5) 12 \ \& \ 18$$

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

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  12 = 2 · 2 · 3
   / \
  2  6
   / \
  2  3

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$$18 = 2 \cdot 3 \cdot 3$$

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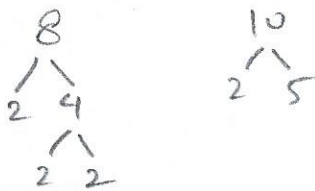
  18 = 2 · 3 · 3
   / \
  2  9
   / \
  3  3

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$$L.C.M = 2 \cdot 2 \cdot 3 \cdot 3$$

$$= 36$$

$$6) 8 \& 10$$



$$\begin{aligned} \text{L.C.M} &= 2 \cdot 2 \cdot 2 \cdot 5 \\ &= 40 \end{aligned}$$

$$8) 10, 24 \& 32$$

$$10 = 2 \cdot 5$$

$$24 = 2 \cdot 2 \cdot 2 \cdot 3$$

$$32 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$$

$$\begin{aligned} \text{L.C.M} &= 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 \cdot 5 \\ &= 480 \end{aligned}$$

$$10) 14, 12, 21, 28$$

$$14 = 2 \cdot 7$$

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

$$21 = 3 \cdot 7$$

$$28 = 2 \cdot 2 \cdot 7$$

$$\begin{aligned} \text{L.C.M} &= 2 \cdot 2 \cdot 3 \cdot 7 \\ &= 84 \end{aligned}$$

$$7) 9 \& 24$$

$$\text{L.C.M} = 72$$

$$9) 16, 20 \& 25$$

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

$$20 = 2 \cdot 2 \cdot 5$$

$$25 = 5 \cdot 5$$

$$\begin{aligned} \text{L.C.M} &= 2 \cdot 2 \cdot 2 \cdot 2 \cdot 5 \cdot 5 \\ &= 400 \end{aligned}$$

39) $\frac{10}{9} + \frac{5}{12}$ (ii) L.C.D = 36

$$(ii) \frac{10}{9} \cdot \frac{4}{4} + \frac{5}{12} \cdot \frac{3}{3}$$

$$= \frac{40}{36} + \frac{15}{36}$$

$$= \frac{40+15}{36}$$

$$= \frac{55}{36}$$

40) $\frac{7}{6} - \frac{1}{15}$

L.C.M = C.D = 30

$$= \frac{7}{6} \cdot \frac{5}{5} - \frac{1}{15} \cdot \frac{2}{2}$$

$$= \frac{35}{30} - \frac{2}{30}$$

$$= \frac{35-2}{30}$$

$$= \frac{33}{30}$$

$$= \frac{3 \cdot 11}{3 \cdot 10}$$

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

$$* \quad \frac{5}{3} + \frac{5}{8} - \frac{7}{6}$$

$$\text{L.C.M} = \text{C.D.} = 24$$

$$= \frac{5}{3} \cdot \frac{8}{8} + \frac{5}{8} \cdot \frac{3}{3} - \frac{7}{6} \cdot \frac{4}{4}$$

$$= \frac{40}{24} + \frac{15}{24} - \frac{28}{24}$$

$$= \frac{40 + 15 - 28}{24}$$

$$= \frac{27}{24} = \frac{9}{8}$$

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

$$\text{L.C.M} = \text{C.D.} = 180$$

$$= \frac{7}{12} \cdot \frac{15}{15} + \frac{5}{18} \cdot \frac{10}{10} - \frac{2}{15} \cdot \frac{12}{12}$$

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

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

$$= \frac{131}{180}$$