

Pg1 Ex1.1

1) (a) 20 000 (b) 14 000 (c) 17 000 (d) 26 000

2) (a) 82 (b) 382 (c) 1700

(d) 3812 (e) 4006 (f) 3132

(g) 5366.

3) (a) 29 : Twenty nine.

(b) 17 : seventeen

(c) 126 : one hundred and twenty six.

(d) 834 : Eight hundred and thirty four

(e) 2340 : Two thousand three hundred and forty.

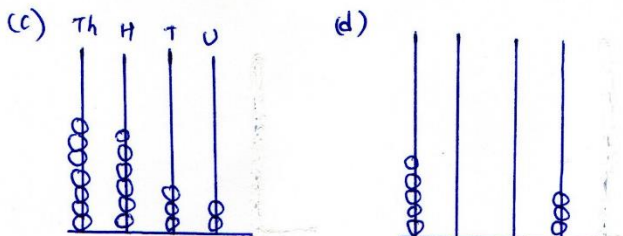
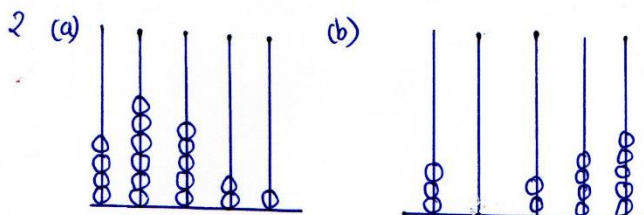
(f) 3462 : Three thousand four hundred and sixty two.

(g) 10426 : Ten thousand four hundred and twenty six.

(h) 63753 : sixty three thousand seven hundred and fifty three.

Pg2 Ex1.2

1) (a) 21634 (b) 3052



Pg2 Ex1.3

(a) 4 thousands

(b) 3 hundreds.

(c) 7 tens

(d) 2 units

(e) 6 ten thousands

Pg3 Q2

(a) 500

(b) 1000 (c) 5000

(d) 90 000

(e) 80 000, 500.

Pg3 Ex1.4

1) (a) 7648

(b) 42367 (c) 1000, 10

(d) 10000, 1000 (e) 100, 10

2 (a) 3, 9, 14, 20, 36.

(b) 30, 31, 33, 34, 37.

(c) 236, 263, 326, 362.

3 (a) 457, 475, 547, 574.

(b) 9346, 9463, 9643.

(c) 248, 252, 253, 532, 842.

4 (a) 37, 30, 21, 13, 8.

(b) 201, 149, 135, 121, 99.

(c) 643, 634, 463, 436, 346, 364.

5 (a) 963, 936, 693, 639.

(b) 8724, 8427, 8247.

(c) 743, 734, 473, 437, 374, 347

Pg4: Unit 2. Ex2.1

1 (a) 10076

(b) 6516.

2) 28

3)  $(14230 + 20370) = \text{Rs } 34600$

4)  $(24 + 36 + 43) = 103$

Pg5 Ex2.2

1 (a) 2442

(b) 3158

(c) 1076.

2)  $(18 - 7) = 11.$

3)  $(750 - 215) = 535.$

4) (a)  $(580 - 367) = 213$

(b)  $(6934 - 5487) = 1447$

Pg 5 Q4.5

- (a)  $(984 - 786) = 198$
- (b)  $(8764 - 6784) = 1980$
- (c)  $(345 - 156) = 189$
- (d)  $(5678 + 657) = 6335$

Pg 6 Ex 2.3

- 1 (a) 46 (b) 135 (c) 268 (d) 1554.
- 2 (a) 340 (b) 790 (c) 2800 (d) 7000
- 3 (a) 1060 (b) 2220 (c) 4920 (d) 6860
- 4 (a) 2600 (b) 9000 (c) 4800 (d) 14800

Pg 7 Ex 2.4

- (a) 364 (b) 864 (c) 1216 (d) 6566

Pg 8 Ex 2.5

- 1 (a) 2852 (b) 4374 (c) 15696 (d) 30351
- 2)  $(84 \times 6) = 324$
- 3)  $(34569 \times 2) = 69138$
- 4)  $(62 \times 54) = 3348$
- 5)  $(124 \times 48) = 5952$

Pg 9 Ex 2.6

- 1 (a) 70 (b) 84 (c) 200
- (d) 20 (e) 47 (f) 7

Pg 9 Ex 2.7

- (a) 24 (b) 48 (c) 254
- (d) 306 (e) 54 (f) 650
- (g) 850 (h) 302 (i) 601

Pg 10 Ex 2.8

- (a) 8 R 1 (b) 15 R 2 (c) 12 R 2
- (d) 49 R 3 (e) 41 R 1 (f) 105 R 6

Pg 11 Ex 2.9

- 1 (a) 45 (b) 36 (c) 236 (d) 256

2 (a) 
$$\begin{array}{r} 17 \overline{) 399} \\ \underline{34} \phantom{0} \\ 59 \\ \underline{51} \\ 8 \end{array}$$

Remainder = 8

(b) 
$$\begin{array}{r} 26 \overline{) 1466} \\ \underline{130} \phantom{0} \\ 166 \\ \underline{156} \\ 10 \end{array}$$

Remainder = 10

(c) 
$$\begin{array}{r} 19 \overline{) 8895} \\ \underline{76} \phantom{00} \\ 1295 \\ \underline{114} \phantom{0} \\ 155 \\ \underline{152} \\ 3 \end{array}$$

Remainder = 3

(d) 
$$\begin{array}{r} 37 \overline{) 9410} \\ \underline{74} \phantom{00} \\ 2010 \\ \underline{185} \phantom{0} \\ 160 \\ \underline{148} \\ 12 \end{array}$$

Remainder = 12

- 3)  $8 \overline{) 4480} = 560$
- 4)  $15 \overline{) 2190} = 146$
- 5)  $15 \overline{) 3000} = 200$

6) 
$$\begin{array}{r} 5 \\ 6 \overline{) 304} \\ \underline{30} \\ 4 \end{array} \quad 5 \text{ R } 4$$

No of boats needed =  $(5+1) = 6$

7) 
$$\begin{array}{r} 48 \\ 12 \overline{) 580} \\ \underline{48} \phantom{0} \\ 100 \\ \underline{96} \\ 4 \end{array} \quad 48 \text{ R } 4$$

No of boxes =  $(48+1) = 49$

Pg 14 Unit 3: Ex 3.1

- 1 (a) 25 (b) 36 (c) 49
- (d) 64 (e) 81 (f) 100
- (g) 121 (h) 144 (i) 169
- (j) 196 (k) 225 (l) 256

- 2) (b)  $25 = 5 \times 5$  (c)  $64 = 8 \times 8$
- (d)  $121 = 11 \times 11$  (e)  $225 = 15 \times 15$
- (f)  $400 = 20 \times 20$

$\sqrt{2}$

Pg 14 Ex 3.1 N<sup>o</sup> 3.

(a) 25, 36.

(b) 36, 49, 64, 81, 100

4) (a) 16.  
(b) 64.  
(c) 81.

5) (a) 16.  
(b) 49  
(c) 121

Pg 15 Ex 3.2

(a) 26, 29

(b) 252, 258

(c) 43, 40

(d) 90, 80

(e) 2355, 2365

(f) 402, 382.

Pg 15 Ex 3.3

(a) 625, 3125

(b) 1,  $\frac{1}{4}$

(c) 324, 972

(d) 16, 4.

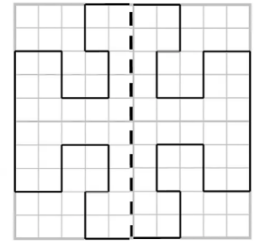
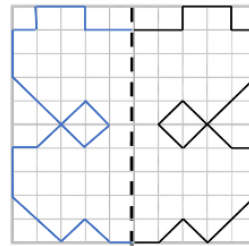
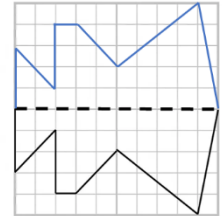
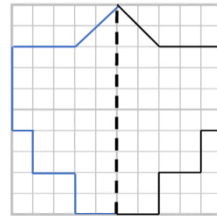
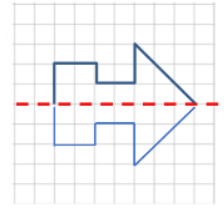
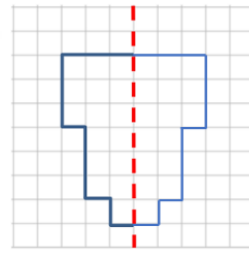
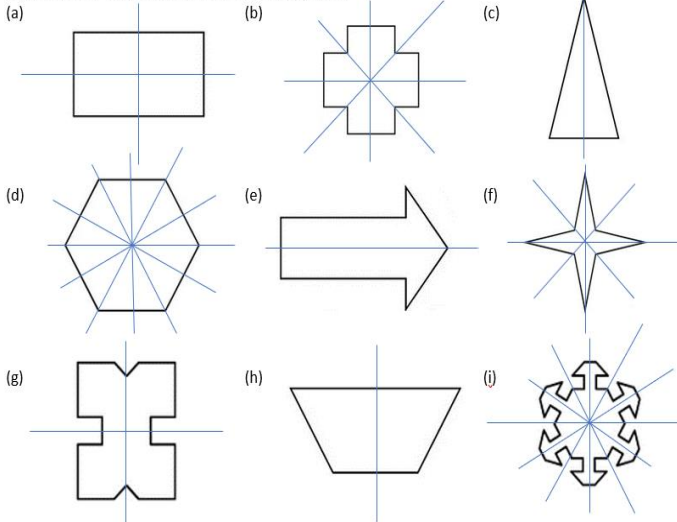
(e) 100, 10

(f) 243, 729.

Exercise 4.1

1. Tick = b, c, d, e, g, j, k

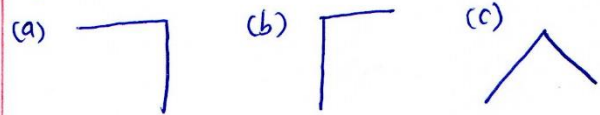
2. Draw the lines of symmetry of the following figures.



Pg 18 Ex 5.1

N<sup>o</sup> 1 (i) right angles: a, d, e  
(ii) less than right angle: c, h.  
(iii) more than right angle: b, f, g

Pg 19 N<sup>o</sup> 2



3) (a) 4 (b) 0 (c) 1 (d) 0  
(e) 4 (f) 0 (g) 2 (h) 14.

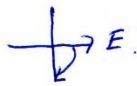
Pg 20 Ex 5.2

1 (a)  $\frac{1}{2} \times 360^\circ = 180^\circ = 2$  right angles.  
(b)  $\frac{3}{4} \times 360 = 270 = 3$ .  
(c)  $= 360^\circ = 4$ .  
(d)  $(360 + 90) = 450 = 5$   
(e)  $(360 \times 3) = 1080^\circ = 12$



Pg 21 Ex 5.3

- 1 (a) South  
(b) 2.
- 2) (a) West.  
(b) 3.
- 3) 1
- 4) 3.



Pg 22 Ex 6.1

- 1 (a) Equal sides: AB, AC.  
angle r and angle q
- (b) RQ, PQ.  
angle z, angle x
- (c) AB and AC.  
angle 50°, angle 50°
- (d) RQ, RP.  
angle 53°, angle 53°
- 2) (a) AB and AC.  
angle b and angle c
- (b) RT and ST.  
angle r and angle s.

Pg 24 Ex 6.2

- (a) ✓ (b) x (c) x  
(d) ✓ (e) x (f) ✓

Ex 6.3

- (a) A, C, E  
(b) B, F

Pg 25 Ex 6.4

- (a) perpendicular (b) parallel (c) parallel  
(d) perpendicular (e) perpendicular (f) parallel.

Pg 26 Ex 6.5

- (a) 4 (b) PQ = QR = RS = SP.  
(c) 90° (d) SR (e) QR or PS.  
(f) parallel (g) perpendicular (h) 4

Pg 27 Ex 6.6

- (a) QR (b) PQ (c) equal or 90°  
(d) SR (e) QR (f) parallel.  
(g) perpendicular.

Ex 6.7

- (a) SR (b) PS (c) PQ. (d) QR.  
(e) r (f) s.

Pg 28 Ex 6.8

- (a) 4, 4 (b) PQ (c) RA (d) S, 9

Unit 7.

Pg 29 Ex 7.1

1 (a) Average =  $\frac{7+9+14}{3} = \frac{30}{3} = 10 \leftarrow$

(b) Average =  $\frac{20+25+32+33}{4} = \frac{100}{4} = 25 \leftarrow$

(c) Average =  $\frac{19+34+43}{3} = \frac{96}{3} = 32 \leftarrow$

(d) Average =  $\frac{8+11+18+10+13}{5} = \frac{60}{5} = 12 \leftarrow$

No 2 :

(a) Sum =  $(25+45+20) = 90$ .  
Average =  $\frac{90}{3} = 30 \leftarrow$

Pg 30 Ex 7.2

1) Sum =  $(17 \times 3) = 51 \leftarrow$

2) Total weight =  $(62 \times 4) = 248 \text{ kg} \leftarrow$

3) No of friends =  $\frac{\text{Sum}}{\text{Average}} = \frac{480}{60} = 8 \leftarrow$

4) No of classrooms =  $\frac{360}{40} = 9 \leftarrow$

5) Sum of 4 girls =  $(56 \times 4) = 224 \text{ kg}$   
Sum of 5 girls =  $(224 + 66) = 290 \text{ kg}$   
Average of 5 girls =  $\frac{290}{5} = 58 \text{ kg} \leftarrow$

6) Sum of 6 girls =  $(160 \times 6) = 960 \text{ cm}$ .  
Sum of 5 girls =  $(960 - 140) = 820$   
Average of 5 girls =  $\frac{820}{5} = 164 \text{ cm} \leftarrow$

Unit 8

Pg 32 Ex 8.1

- 1) a)  $(3 \times 4) = \text{Rs } 12 \leftarrow$   
 (b)  $(30 \times 6) = \text{Rs } 180 \leftarrow$
- 2) (a)  $(12 \times 5) = \text{Rs } 60 \leftarrow$   
 (b)  $(12 \times 20) = \text{Rs } 240 \leftarrow$
- 3)  $(220 \times 7) = 1540$  breads.  
 4)  $(24 \times 16) = 384$  oranges.

Pg 33 Ex 8.2

- 1 (i) 1 apple =  $\frac{60}{5} = \text{Rs } 12$ .  
 (ii) 12 apples =  $(12 \times 12) = \text{Rs } 144$ .
- 2) 8 chairs =  $\text{Rs } 1600$ .  
 1 chair =  $\frac{1600}{8} = 200$ .  
 15 chairs =  $(15 \times 200) = \text{Rs } 3000 \leftarrow$
- 3) 4 cups  $\rightarrow$  12 spoons.  
 1 cup  $\rightarrow$   $\frac{12}{4} = 3$  spoons.  
 15 cups =  $(3 \times 15) = 45$  spoons  $\leftarrow$

Pg 34 Ex 8.3

- 1)  $\text{Rs } 30 \rightarrow 6$  oranges.  
 $\text{Rs } 1 \rightarrow \frac{6}{30}$ .  
 $\text{Rs } 120 \rightarrow \left(\frac{6}{30} \times 120\right) = 24$  oranges  $\leftarrow$
- 2) 20 km  $\rightarrow$  8 litres.  
 1 km  $\rightarrow \frac{8}{20}$ .  
 300 km  $\rightarrow \left(\frac{8}{20} \times 300\right) = 120$  litres  $\leftarrow$
- 3) 48 kg  $\rightarrow$  6 bags.  
 1 kg  $\rightarrow \frac{6}{48}$   
 240 kg  $\rightarrow \left(\frac{6}{48} \times 240\right) = 30$  bags  $\leftarrow$
- 4)  $\text{Rs } 70 \rightarrow 3$  articles.  
 $\text{Rs } 1 \rightarrow \frac{3}{70}$ .  
 $\text{Rs } 840 \rightarrow \left(\frac{3}{70} \times 840\right) = 36$  articles  $\leftarrow$

Pg 35 Ex 9.1

- (a)  $10 : 15 \xrightarrow{\div 5}$   
 $2 : 3$
- (c)  $10 : 20 \xrightarrow{\div 10}$   
 $1 : 2$
- (e)  $14 : 21 \xrightarrow{\div 7}$   
 $2 : 3$
- (b)  $12 : 14 \xrightarrow{\div 2}$   
 $6 : 7$
- (d)  $36 : 45 \xrightarrow{\div 9}$   
 $4 : 5$
- (f)  $40 : 32 \xrightarrow{\div 4}$   
 $10 : 8 \xrightarrow{\div 2}$   
 $5 : 4$

Pg 36 N=2

- 2 (a) Boy : Girls.  
 $3 : 8$
- (b) girls : Boys.  
 $8 : 3$ .
- 4) (a) Circles : triangles.  
 $12 : 9 \xrightarrow{\div 3}$   
 $4 : 3$ .
- (b) triangles : circles.  
 $3 : 4$ .
- (c) Total =  $(12 + 9) = 21$ .  
 Circles : Total.  
 $12 : 21 \xrightarrow{\div 3}$   
 $4 : 7$ .
- 3) Bicycles : airplanes.  
 $6 : 2$   
 $3 : 1$
- 5) (a) Blue : Red.  
 $15 : 10 \xrightarrow{\div 5}$   
 $3 : 2$ .
- (b) Green : Blue.  
 $5 : 15$   
 $1 : 3$ .
- (c) red : Total  
 $10 : 30$   
 $1 : 3$ .

Pg 37 Ex 9.2

- 1) (a) =  $4 : 9$  (b)  $12 : 18 \xrightarrow{\div 3}$   
 $2 : 3$  (c)  $\frac{24}{9} =$   
 $\frac{24 \div 3}{9 \div 3} = \frac{8}{3} \leftarrow$
- 2) (a)  $\frac{6}{9} = \frac{2}{3}$  (b)  $\frac{18}{24} = \frac{3}{4}$  (c)  $\frac{15}{30} = \frac{1}{2}$

Pg 38 Ex 9.3

- 1) apples : oranges.  
 $2 : 3 \xrightarrow{\times 6}$  oranges = 18.  
 $\times 6$   $12 : 18$
- 2) Red : white.  
 (a)  $3 : 5 \xrightarrow{\times 8}$   
 $\times 8$   $(24 : 40)$   
 red = 24  $\leftarrow$
- (b) Total =  $(40 + 24) = 64$ .



Pg 39 N<sup>o</sup> 3

Boys : girls : Total.  
 $\times 7 \left( \begin{array}{l} 1 \\ 7 \end{array} : 3 \right) \times 7$  28  $\downarrow \times 7$   
 21 4  
 Boys = 7 ←

4) Tom Jerry : Total.  
 $\times 40 \left( \begin{array}{l} 4 \\ 160 \end{array} : 5 \right) \times 40$  360  $\downarrow \times 40$   
 200 9  
 Jerry = Rs 200 ←

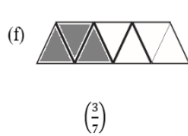
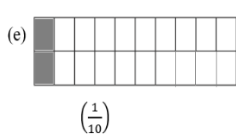
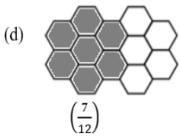
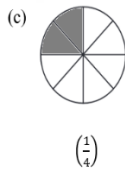
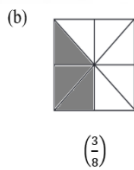
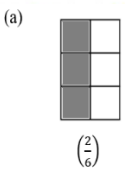
Pg 39 Ex 9.4

1) Ali Ravi More.  
 $\times 14 \left( \begin{array}{l} 3 \\ 42 \end{array} : 7 \right) \times 14$  56  $\downarrow \times 14$   
 98 4  
 Total = (42 + 98) = 140 ←

2) Boys : Girls : less  
 $\times 4 \left( \begin{array}{l} 4 \\ 16 \end{array} : 5 \right) \times 4$  4  $\downarrow \times 4$   
 20 1  
 N<sup>o</sup> of students = (16 + 20) = 36 ←

Pg 40 Ex 10.1

(a)  $\frac{3}{4}$  (b)  $\frac{2}{4}$  or  $\frac{1}{2}$  (c)  $\frac{3}{6}$  or  $\frac{1}{2}$ .  
 (d)  $\frac{2}{10}$  or  $\frac{1}{5}$  (e)  $\frac{3}{8}$  (f)  $\frac{1}{4}$ .



Ex 2) (a)  $\frac{1}{4}$  (b)  $\frac{1}{9}$  (c)  $\frac{1}{10}$ .  
 (d)  $\frac{3}{4}$  (e)  $\frac{2}{7}$  (f)  $\frac{5}{8}$ .

- 3) (a) one half.  
 (b) one third.  
 (c) one sixth.  
 (d) two ninths.  
 (e) three quarters.  
 (f) seven tenths.

Pg 42 Ex 10.3

(a)  $\frac{4}{12}$  (b)  $\frac{3}{6}$  (c)  $\frac{10}{15}$ .  
 (d)  $\frac{6}{10}$  (e)  $\frac{8}{44}$  (f)  $\frac{28}{60}$

2)  $\frac{5}{25}$  (b).

3)  $\frac{12}{16}$  (d)

Pg 43 Ex 10.4

1 (a)  $A = \frac{1}{2}$ . (b)  $A = \frac{2}{3}$ ,  $B = 1\frac{1}{3}$   
 (c)  $A = \frac{2}{5}$ ,  $B = 1\frac{1}{5}$ .

Pg 44 Ex 10.5

(a)  $\frac{7}{4}$  (b)  $\frac{9}{7}$  (c)  $\frac{14}{9}$ .  
 (d)  $\frac{11}{4}$  (e)  $\frac{16}{5}$  (f)  $\frac{65}{9}$ .

Ex 10.6

(a)  $1\frac{1}{2}$  (b)  $4\frac{1}{2}$  (c)  $3\frac{2}{9}$ .  
 (d)  $4\frac{1}{3}$  (e)  $4\frac{3}{4}$  (f)  $4\frac{2}{7}$

Pg 45 Ex 10.7

(a)  $1\frac{1}{3}$  (b)  $4\frac{3}{5}$  (c)  $6\frac{5}{11}$ .

Ex 10.8

1 (a)  $\frac{4}{5}$  (b)  $\frac{8}{11}$ .

(c)  $\frac{1}{4} \times 3 + \frac{5}{12} = \frac{3}{12} + \frac{5}{12} = \frac{8}{12}$  or  $\frac{2}{3}$

(d)  $\frac{1}{3} \times 3 + \frac{2}{9} = \frac{3}{9} + \frac{2}{9} = \frac{5}{9}$

(e)  $\frac{1}{4} \times 5 + \frac{3}{5} \times 4 = \frac{5}{20} + \frac{12}{20} = \frac{17}{20}$ .

(f)  $\frac{2}{5} \times 3 + \frac{7}{15} = \frac{6}{15} + \frac{7}{15} = \frac{13}{15}$

6

Pg 46 Ex 10.9

1 (a)  $\frac{2}{9} + 1\frac{5}{9} = 1\frac{7}{9}$ .

(b)  $2\frac{1}{3} + \frac{4}{15} = 2 + \left(\frac{1 \times 5}{3 \times 5} + \frac{4}{15}\right)$   
 $= 2 + \left(\frac{5}{15} + \frac{4}{15}\right) = 2\frac{9}{15}$  or  $2\frac{3}{5}$  ←

(c)  $\frac{5}{9} + 1\frac{2}{3} = 1 + \left(\frac{5}{9} + \frac{2 \times 3}{3 \times 3}\right)$   
 $= 1 + \left(\frac{5}{9} + \frac{6}{9}\right)$   
 $= 1 + \left(\frac{11}{9}\right) = 1 + 1\frac{2}{9} = 2\frac{2}{9}$  ←

(d)  $1\frac{1}{4} + 2\frac{7}{12} = 3 + \left(\frac{1 \times 3}{4 \times 3} + \frac{7}{12}\right)$   
 $= 3 + \frac{3}{12} + \frac{7}{12}$   
 $= 3\frac{10}{12} = 3\frac{5}{6}$  ←

(e)  $1\frac{1}{4} + 2\frac{5}{6} = 3 + \left(\frac{1 \times 3}{4 \times 3} + \frac{5}{6 \times 2}\right)$   
 $= 3 + \left(\frac{3}{12} + \frac{10}{12}\right)$   
 $= 3 + \left(\frac{13}{12}\right) = 3 + \left(1\frac{1}{12}\right)$   
 $= 4\frac{1}{12}$  ←

(f)  $3\frac{3}{10} + 2\frac{5}{12} = 5 + \left(\frac{3 \times 6}{10 \times 6} + \frac{5 \times 5}{12 \times 5}\right)$   
 $= 5 + \left(\frac{18}{60} + \frac{25}{60}\right)$   
 $= 5 + \frac{43}{60}$   
 $= 5\frac{43}{60}$  ←

Pg 47 Ex 10.10

1 (a)  $3 - \frac{2}{9} = 2\frac{9}{9} - \frac{2}{9} = 2\frac{7}{9}$  ←

(b)  $5 - 2\frac{3}{7} = 4\frac{7}{7} - 2\frac{3}{7} = 2\frac{4}{7}$  ←

(c)  $3\frac{7}{11} - 1\frac{2}{11} = 2\frac{5}{11}$  ←

(d)  $5\frac{1}{2} - 2\frac{3}{8} = 3 + \left(\frac{1 \times 4}{2 \times 4} - \frac{3}{8}\right)$   
 $= 3 + \left(\frac{4}{8} - \frac{3}{8}\right)$   
 $= 3\frac{1}{8}$  ←

(e)  $3\frac{9}{14} - 1\frac{1}{7} = 2\left(\frac{9}{14} - \frac{1 \times 2}{7 \times 2}\right)$   
 $= 2\left(\frac{9}{14} - \frac{2}{14}\right)$   
 $= 2\frac{7}{14}$  or  $2\frac{1}{2}$  ←

(f)  $7\frac{9}{10} - 2\frac{4}{15} = 5\left(\frac{9 \times 3}{10 \times 3} - \frac{4 \times 2}{15 \times 2}\right)$   
 $= 5\left(\frac{27}{30} - \frac{8}{30}\right)$   
 $= 5\frac{19}{30}$  ←

Pg 48 Ex 10.11

1 (a)  $\frac{2}{3} \times 10^2 = 6$ . (b)  $\frac{2}{8} \times \frac{1}{4} = 2$ .

(d)  $1\frac{2}{3} = \frac{5}{3} \times 12^4 = 20$ .

(e)  $\frac{2}{3} \times 10 = \frac{20}{3}$  or  $6\frac{2}{3}$ .

(e)  $3\frac{1}{4} \times 8 = (3 \times 8) + \left(\frac{1}{4} \times 8\right)$   
 $= 24 + 2 = 26$  ←

(f)  $2\frac{1}{6} \times 12 = (2 \times 12) + \left(\frac{1}{6} \times 12\right)$   
 $= 24 + 2 = 26$ .

Pg 49 Ex 10.12

1 (a)  $\frac{2}{3} \div 5 = \frac{2}{3} \times \frac{1}{5} = \frac{2}{15}$  ←

(b)  $\frac{4}{3} \div 2 = \frac{4}{3} \times \frac{1}{2} = \frac{2}{3}$ .

(c)  $\frac{2}{3} \div 7 = \frac{2}{3} \times \frac{1}{7} = \frac{2}{21}$ .

(d)  $2\frac{1}{4} \div 3 = \frac{9}{4} \div 3 = \frac{9}{4} \times \frac{1}{3} = \frac{3}{4}$ .

(e)  $1\frac{2}{5} \div 3 = \frac{7}{5} \div 3 = \frac{7}{5} \times \frac{1}{3} = \frac{7}{15}$ .

(f)  $4\frac{4}{5} \div 6 = \frac{24}{5} \div 6 = \frac{24}{5} \times \frac{1}{6} = \frac{4}{5}$

Pg 50 Ex 10.13

1) D:  $\frac{1}{256}$  2) A:  $\frac{1}{5}$

3)  $\frac{1 \times 4}{9 \times 4}$ ,  $\frac{1 \times 3}{12 \times 3}$ ,  $\frac{1 \times 2}{18 \times 2}$   
 $\frac{4}{36}$ ,  $\frac{3}{36}$ ,  $\frac{2}{36}$ .

Ans:  $\frac{1}{18}$ ,  $\frac{1}{12}$ ,  $\frac{1}{9}$



Pg 50 Ex 10.13

4)  ~~$\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$~~

4 a)  $2\frac{1}{2} + 1\frac{3}{4} = 3 + (\frac{1}{2} + \frac{3}{4})$   
 $= 3 + \frac{2}{4} + \frac{3}{4}$   
 $= 3 + \frac{5}{4}$   
 $= 3 + 1\frac{1}{4} = 4\frac{1}{4}$  km ←

(b)  $2\frac{1}{2} - 1\frac{3}{4} = \frac{5}{2} - \frac{7}{4}$   
 $= \frac{10}{4} - \frac{7}{4} = \frac{3}{4}$  ←

5 a) Adults =  $(1 - \frac{7}{12}) = \frac{5}{12}$ .

№ of adults =  $(\frac{5}{12} \times 3600) = 1500$  ←

6 a) Food =  $(\frac{1}{3} \times 1200) = \text{Rs } 400$

(b) Transport =  $(\frac{3}{10} \times 1200) = \text{Rs } 360$ .

In all =  $(400 + 360) = \text{Rs } 760$ .

(c) left =  $(1200 - 760) = \text{Rs } 440$ .

7 a)  $\frac{3}{8} \div 4 = \frac{3}{8} \times \frac{1}{4} = \frac{3}{32}$  ←

Pg 51 Ex 11.1

- |          |           |           |
|----------|-----------|-----------|
| (a) 0.7  | (b) 0.75  | (c) 0.983 |
| (d) 0.07 | (e) 0.009 | (f) 0.099 |
| (g) 1.6  | (h) 1.25  | (i) 0.001 |

Pg 52 Ex 11.2

- |          |           |           |
|----------|-----------|-----------|
| (a) 1.3  | (b) 2.7   | (c) 4.1   |
| (d) 3.07 | (e) 3.005 | (f) 7.023 |

Ex 11.3

- |              |                |
|--------------|----------------|
| (a) 2.4, 2.5 | (b) 7.17, 7.18 |
| (c) 3.0, 3.1 | (d) 1.0, 1.2   |
| (e) 3.9, 4.1 | (f) 5.0, 5.5   |
| (g) 5.4, 5.3 | (h) 4.0, 3.9   |

Ex 11.4

- (a) 0.3 = 3 tenths.  
 (b) 0.5 = 5 tenths.  
 (c) 0.24 = 2 tenths + 4 hundredths.  
 (d) 0.62 = 6 tenths + 2 hundredths.  
 (e) 0.06 = 6 hundredths.  
 (f) 0.08 = 8 hundredths.  
 (g) 3.4 = 3 units + 4 tenths.  
 (h) 1.6 = 1 unit + 6 tenths.  
 (i) 2.56 = 2 units + 5 tenths + 6 hundredths.  
 (j) 5.79 = 5 units + 7 tenths + 9 hundredths.  
 (k) 6.62 = 6 units + 2 hundredths.  
 (l) 2.01 = 2 units + 1 hundredths.

Pg 53 Ex 11.5

- (a) 0.6  
 (b) 0.4  
 (c) 0.25  
 (d) 0.76  
 (e) 3.13  
 (f) 4.05  
 (g) 6.52  
 (h) 1.96  
 (i) 3.25  
 (j) 4.61

Pg 54 Ex 11.6

- (a) three tenths.  
 (b) eight tenths.  
 (c) forty one hundredths.  
 (d) sixty six hundredths.  
 (e) ~~8~~ Three and one tenths.  
 (f) four and eight tenths.  
 (g) four and fifteen hundredths.  
 (h) eight and forty five hundredths.  
 (i) seventeen and twelve hundredths.  
 (j) thirty four and sixty seven hundredths.



Pg 54 Ex 11.7

- (a) 3.7
- (b) 16.1
- (c) 7.9
- (d) 9.4
- (e) 11.7
- (f) 16.0
- (g) 38.3
- (h) 38.1
- (i) 358.1
- (j) 190.1
- (k) 138.6
- (l) 211.0

Ex 11.8

- (a) 4.78
- (b) 5.22
- (c) 7.25
- (d) 16.69
- (e) 44.93
- (f) 124.31
- (g) 138.56
- (h) 141.02
- (i) 324.00

Pg 56 Ex 11.9

- (a) 2.3
- (b) 1.9
- (c) 9.1
- (d) 17.9
- (e) 9.9
- (f) 3.6
- (g) 105.7
- (h) 6.4
- (i) 35.1

Pg 57 Ex 11.10

- (a) 3.34
- (b) 2.24
- (c) 2.85
- (d) 1.83
- (e) 23.89
- (f) 1.88
- (g) 4.47
- (h) 0.84
- (i) 4.94

Pg 58 Ex 11.11

- 1 (a)  $(17.2 - 2.4) = 4.8$
- (b)  $(3.2 - 0.6) = 2.6$
- (c)  $(5.9 - 2.3) = 3.6$
- (d)  $(14.82 - 7.60) = 7.22$
- (e)  $(12.3 - 6.5) = 5.8$
- (f)  $(14.82 + 7.60) = 22.42$

2) a) Total =  $(1.8 + 2.7) = 4.5 \text{ m}$ .

b) longer =  $(2.7 - 1.8) = 0.9 \text{ m}$ .

3) (a) Total =  $(3.6 + 7.4) = 11.0 \text{ kg}$ .

(b) More =  $(7.4 - 3.6) = 3.8 \text{ kg}$

Unit 12.

Pg 59 Ex 12.1

- (a)  $6^3$
- (b)  $2^4$
- (c)  $7^2$
- (d)  $5^2$
- (e)  $3^3$
- (f)  $4^5$

Ex 12.2

- (a) 25
- (b) 36
- (c) 27
- (d) 1
- (e) 64
- (f) 10000

Ex 12.3

- (a)  $4 + 5 = 9$
- (b)  $9 + 64 = 73$
- (c)  $36 + 10 = 46$
- (d)  $25 - 7 = 18$
- (e)  $9 - 1 = 8$
- (f)  $125 - 64 = 61$

Pg 60 Ex 12.4

- (a)  $9 \times 4 = 36$
- (b)  $25 \times 6 = 150$
- (c)  $8 \times 9 = 72$
- (d)  $27 \times 5 = 135$
- (e)  $49 \times 16 = 784$
- (f)  $125 \times 8 = 1000$

Pg 61 Ex 12.5

- (a)  $64 \div 4 = 16$
- (b)  $\frac{8 \times 8 \times 8}{4 \times 4 \times 4} = 8$
- (c)  $\frac{16 \times 10 \times 10}{8 \times 8} = 40$
- (d)  $\frac{9 \times 9 \times 9}{6 \times 6} = \frac{81}{4}$

Pg 62 Ex 13.1

- (a)  $34 \text{ mm}, 3.4 \text{ cm}$
- (b)  $110 \text{ mm}, 11 \text{ cm}$
- (c)  $48 \text{ mm}, 4.8 \text{ cm}$

Ex 13.2

- (a)  $8 \times 10 = 80 \text{ mm}$
- (b)  $12 \times 10 = 120 \text{ mm}$
- (c)  $(7 \times 10) + 4 = 74 \text{ mm}$
- (d)  $(12 \times 10) + 8 = 128 \text{ mm}$

Pg 63 Ex 13.3

- (a)  $\frac{80}{10} = 8 \text{ cm}$
- (b)  $\frac{100}{10} = 10 \text{ cm}$
- (c)  $\frac{150}{10} = 15 \text{ cm}$
- (d)  $\frac{280}{10} = 28 \text{ cm}$

Ex 13.4

- (a)  $(4 \times 100) = 400 \text{ cm}$
- (b)  $(7 \times 100) = 700 \text{ cm}$
- (c)  $(5 \times 100) + 18 = 518 \text{ cm}$
- (d)  $(8 \times 100) + 45 = 845 \text{ cm}$

~~Ex 13~~

Pg 63 Ex 13.5

(a)  $\frac{900}{100} = 9m$

(b)  $\frac{1800}{100} = 18m$

(c)  $\frac{1500}{100} = 15m$

(d)  $\frac{4000}{100} = 40m$

Pg 64 Ex 13.6

(a)  $(255 + 130) = 385 = 3m 85cm$

(b)  $(450 + 395) = 845 = 8m 45cm$

(c)  $(550 - 280) = 270 = 2m 70cm$

(d)  $(725 - 375) = 350 = 3m 50cm$

Pg 65 Ex 13.7

1 (a)  $(24 + 53) = 77 = 7cm 7mm$

(b)  $(48 + 37) = 85 = 8cm 5mm$

(c)  $(63 - 45) = 18 = 1cm 8mm$

(d)  $(41 - 26) = 15 = 1cm 5mm$

Pg 65 Ex 13.8

(a)  $(38 \times 4) = 152mm = 15cm 2mm$

(b)  $(76 \times 5) = 380mm = 38cm$

Pg 66 Ex 13.9

(a)  $4 \overline{) 16} = 4 = 1cm 6mm$

(b)  $6 \overline{) 216} = 36 = 3cm 6mm$

Pg 66 Ex 13.10

1)  $C = 10mm$

2)  $(205 - 32) = 173cm$

3)  $(955 - 285) = 670 = 6m 70cm$

4)  $5 \overline{) 345} = 69mm$  or  $6cm 9mm$

Unit 14

Pg 67 Ex 14.1

1)  $(5 + 7 + 9) = 21cm$

2)  $(19 + 15 + 23) = 57cm$

3)  $(8 + 8 + 13) = 29cm$

4)  $(7 + 7 + 7) = 21cm$

5)  $(23 - 14) = 9cm$

6) 2 sides =  $(22 - 10) = 12cm$

one side =  $(12 \div 2) = 6cm$

Pg 68 Ex 14.2

1)  $(8 + 8 + 8 + 8) = 32cm$

2) ~~4~~  $(120 + 120 + 120 + 120) = 480cm = 4m 80cm$

3) length =  $\frac{56}{4} = 14cm$

Pg 69 Ex 14.3

1)  $(9 + 5 + 9 + 5) = 28cm \leftarrow$

2)  $(13 + 7 + 13 + 7) = 40cm \leftarrow$

3)  $32 - (10 + 10) = 32 - 20 = 12$

width =  $\frac{12}{2} = 6cm \leftarrow$

Pg 70 Ex 14.4

1) length =  $\frac{200}{4} = 50m$

2)  $2L + 2w = 38$

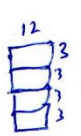
$2L + 6 + 6 = 38$

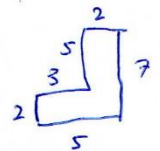
$2L = (38 - 12) = 26$

1 Length =  $\frac{26}{2} = 13cm \leftarrow$

3)  $(3 + 12 + 3 + 5 + 5 + 3 + 12) = 43cm$

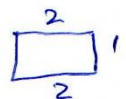
4)  $(3 + 5 + 2 + 7 + 5 + 2) = 24cm$

5)  Perimeter =  $(12 + 12 + 12 + 12) = 48cm$



6) No. of parts =  $(1 + 2 + 1 + 2) = 6$

1 Part =  $\frac{24}{6} = 4cm$



110 length =  $(2 \times 4) = 8cm \leftarrow$



Pg 71

## Unit 15

Pg 71 Ex 15-1

- 1 (a) Area =  $(8 \times 4) = 32 \text{ cm}^2$ .  
 (b) Area =  $(2 \times 10) = 20 \text{ m}^2$ .  
 (c) Area =  $(8 \times 6) = 48 \text{ mm}^2$ .  
 (d) Area =  $(3 \times 9) = 27 \text{ cm}^2$ .

Pg 72 Ex 15-2

- 1) length =  $\frac{40}{5} = 8 \text{ cm}$ .  
 2) width =  $\frac{90}{15} = 6 \text{ m}$ .

Pg 72 Ex 15-3

- 1 (a)  $7 \times 7 = 49 \text{ cm}^2$ .  
 (b)  $9 \times 9 = 81 \text{ cm}^2$

Pg 73 Ex 15-4

1.  $\sqrt{64} = 8 \text{ m}$ .  
 2.  $\sqrt{121} = 11 \text{ cm}$ .

Pg 74 Ex 15-5

- 1) Area =  $\frac{10 \times 7}{2} = 35 \text{ cm}^2$ .  
 2) Area =  $\frac{14 \times 12}{2} = 84 \text{ m}^2$ .  
 3) Area =  $\frac{9 \times 14}{2} = 63 \text{ cm}^2$ .  
 4) Area =  $\frac{4 \times 16}{2} = 32 \text{ mm}^2$ .  
 5) Area of square =  $(12 \times 12) = 144$ .  
 Area of rectangle = 144.  
 $L \times W = 144$   
 $L \times 8 = 144$   
 $L = \frac{144}{8} = 18 \text{ cm} \leftarrow$

- 6) Area of rectangle =  $(14 \times 7) = 98 \text{ cm}^2$ .  
 Area of square =  $(98 \times 2) = 196 \text{ cm}^2$ .  
 length of square =  $\sqrt{196} = 14 \text{ cm}$ .  
 Perimeter of square =  $(14 + 14 + 14 + 14)$   
 $= 56 \text{ cm} \leftarrow$

## Unit 16

Pg 75

- (a) 1 ml, 1 cl, 1 L.  
 (b) 50 ml, 50 cl, 50 L.

Pg 75 Ex 16-1

- 1 (a)  $(7 \times 1000) = 7000 \text{ ml}$  (b)  $(15 \times 1000) = 15000 \text{ ml}$   
 (c)  $3000 + 450 = 3450 \text{ ml}$  (d)  $(2000 + 900) = 2900 \text{ ml}$   
 (e)  $(\frac{1}{2} \times 1000) = 500 \text{ ml}$  (f)  $(\frac{3}{4} \times 1000) = 750 \text{ ml}$   
 (g)  $(3 \times 1000) + (\frac{7}{10} \times 1000) = 3000 + 700$   
 $= 3700 \text{ ml}$ .  
 (h)  $(1 \times 1000) + (\frac{2}{5} \times 1000) = 1000 + 400$   
 $= 1400 \text{ ml}$ .

Pg 76 Ex 16-2

- (a)  $\frac{3000}{1000} = 3 \text{ L}$  (b)  $\frac{100}{1000} = \frac{1}{10} \text{ L}$ .  
 (c)  $\frac{750}{1000} = \frac{3}{4} \text{ L}$  (d)  $3000 + 250$   
 $\frac{3000}{1000} + \frac{250}{1000}$   
 $3\frac{1}{4} \text{ L}$ .  
 (e)  $6200 = 6000 + 200$ .  
 $= \frac{6000}{1000} + \frac{200}{1000}$   
 $= 6 + \frac{1}{5} = 6\frac{1}{5} \text{ L}$   
 (f)  $9750 = 9000 + 750$   
 $= \frac{9000}{1000} + \frac{750}{1000}$   
 $= 9 + \frac{3}{4} = 9\frac{3}{4} \text{ L}$ .

Pg 76 Ex 16-3

- (a)  $7 \times 10 = 70 \text{ ml}$ .  
 (b)  $15 \times 10 = 150 \text{ ml}$ .  
 (c)  $90 \times 10 = 900 \text{ ml}$ .  
 (d)  $\frac{1}{2} \times 10 = 5 \text{ ml}$ .

Pg 76 Ex 16-4

- (a)  $\frac{450}{10} = 45 \text{ cl}$  (b)  $\frac{600}{10} = 60 \text{ cl}$ .  
 (c)  $\frac{380}{10} = 38 \text{ cl}$ . (d)  $\frac{1000}{10} = 100 \text{ cl}$ .

||

Pg 77 Ex 16.5

(a)  $(4 \times 100) = 400 \text{ cl.}$

(b)  $(6 \times 100) + 30 = 630 \text{ cl.}$

(c)  $\left(\frac{1}{2} \times 100\right) = 50 \text{ cl.}$

(d)  $\left(\frac{3}{5} \times 100\right) = 60 \text{ cl.}$

(e)  $3\frac{3}{4} = (3 \times 100) + \left(\frac{3}{4} \times 100\right)$   
 $= 300 + 75 = 375 \text{ cl.}$

(f)  $4\frac{9}{10} = (4 \times 100) + \left(\frac{9}{10} \times 100\right)$   
 $= 400 + 90 = 490 \text{ cl.}$

Pg 78 Ex 16.6

(a)  $\frac{800}{100} = 8 \text{ L}$

(b)  $\frac{75}{100} = \frac{3}{4} \text{ L.}$

(c)  $540 = 500 + 40 = \frac{500}{100} + \frac{40}{100}$   
 $= 5 + \frac{2}{5} = 5\frac{2}{5} \text{ L.}$

(d)  $1460 = 1400 + 60 = \frac{1400}{100} + \frac{60}{100}$   
 $= 14 + \frac{3}{5} = 14\frac{3}{5} \text{ L.}$

Pg 78 Ex 16.7

(a)  $(2150 + 3450) = 5600 \text{ mL}$   
 $= 5 \text{ L } 600 \text{ mL.}$

(b)  $(3230 + 4850) = 8080 \text{ mL.}$   
 $= 8 \text{ L } 080 \text{ mL.}$

(c)  $(1780 + 5830) = 7610 \text{ mL}$   
 $= 7 \text{ L } 610 \text{ mL.}$

(d)  $(4670 - 3320) = 1350 \text{ mL}$   
 $= 1 \text{ L } 350 \text{ mL.}$

(e)  $(4350 - 2550) = 1800 \text{ mL}$   
 $= 1 \text{ L } 800 \text{ mL.}$

(f)  $(7345 - 2455) = 4890$   
 $= 4 \text{ L } 890 \text{ mL.}$

Pg 79 Ex 16.8

(a)  $.220 + 510 = 730 = 7 \text{ L } 30 \text{ cl.}$

(b)  $350 + 475 = 825 = 8 \text{ L } 25 \text{ cl.}$

(c)  $480 + 235 = 715 = 7 \text{ L } 15 \text{ cl.}$

(d)  $770 - 345 = 425 = 4 \text{ L } 25 \text{ cl.}$

(e)  $530 - 170 = 360 = 3 \text{ L } 60 \text{ cl.}$

(f)  $1025 - 275 = 750 = 7 \text{ L } 50 \text{ cl.}$

Pg 80 Ex 16.9

(a)  $(530 \times 4) = 2120 \text{ mL.}$   
 $= 2 \text{ L } 120 \text{ mL.}$

(b)  $(70 \times 6) = 420 \text{ cl.}$   
 $= 4 \text{ L } 20 \text{ cl.}$

(c)  $(4230 \times 5) = 21150 \text{ mL.}$   
 $= 21 \text{ L } 150 \text{ mL.}$

(d)  $(2740 \times 3) = 8220 \text{ mL}$   
 $= 8 \text{ L } 220 \text{ mL.}$

(e)  $(355 \times 4) = 1420 \text{ cl}$   
 $= 14 \text{ L } 20 \text{ cl.}$

(f)  $(670 \times 7) = 4690 \text{ cl.}$   
 $= 46 \text{ L } 90 \text{ cl.}$

Pg 81 Ex 16.10

(a)  $(680 \div 2) = 340 \text{ mL.}$

(b)  $45 \div 3 = 15 \text{ cl.}$

(c)  $(6650 \div 5) = 1330 \text{ mL}$   
 $= 1 \text{ L } 330 \text{ mL.}$

(d)  $(7500 \div 6) = 1250 \text{ mL}$   
 $= 1 \text{ L } 250 \text{ mL}$

(e)  $(560 \div 4) = 140 \text{ cl.}$   
 $= 1 \text{ L } 40 \text{ cl.}$

(f)  $(3250 \div 5) = 650 \text{ cl.}$   
 $= 6 \text{ L } 50 \text{ cl.}$



Pg 82 Ex 16.11

1)  $\frac{1}{2}$  convert all into mL.

$(\frac{1}{2} \times 1000)$  ; 408 ;  $(48 \times 10)$   
500 mL ; 408 mL ; 480 mL.

ascending order = 408 mL, 480 mL,  $\frac{1}{2}$  L. ←

2)  $\frac{3}{4}$  L =  $(\frac{3}{4} \times 1000)$  = 750 mL.

1250 + 750 = 2000 mL = 2 L. ←

3) 75 cl = ~~(75 × 10)~~ 7

200 mL =  $\frac{200}{10}$  = 20 cl.

Total = (75 + 20) = 95 cl ←

4) 5 L = 5000 mL.

$(5000 - 2560)$  = 2440 mL.  
= 2 L 440 mL.

5) 12 guests =  $(3 \times 12)$  = 4500 mL.  
left =  $\frac{300}{4500}$

Total.

$\frac{4500}{1000}$  =  $\frac{4000}{1000} + \frac{500}{1000}$   
=  $4 + \frac{1}{2}$  =  $4\frac{1}{2}$  L.

6)  $(3600 - 1200)$  = 2400 mL.

$\frac{2400}{4}$  = 600 mL ←

17.1

Unit 17

1) (a) gram (g) (b) gram (g) (c) kilogram (kg) (d) kg

Ex 17.2

(a)  $(5 \times 1000)$  = 5000 g.

(b)  $(12 \times 1000)$  = 1200 g.

(c)  $(3 \times 1000) + 550$  = 3550 g.

(d)  $(2 \times 1000) + 900$  = 2900 g.

(e)  $(\frac{1}{2} \times 1000)$  = 500 g.

(f)  $(\frac{3}{4} \times 1000)$  = 750 g

(g)  $(4 \times 1000) + (\frac{3}{10} \times 1000)$  = 4000 + 300  
= 4300 g.

(h)  $(1 \times 1000) + (\frac{3}{5} \times 1000)$  = 1000 + 600  
= 1600 g.

Pg 84 Ex 17.2

(a)  $\frac{4000}{1000}$  = 4 kg.

(b)  $\frac{100}{1000}$  =  $\frac{1}{10}$  kg.

(c)  $\frac{750}{1000}$  =  $\frac{3}{4}$  kg.

(d)  $2000 + 250$  =  $\frac{2000}{1000} + \frac{250}{1000}$   
=  $2 + \frac{1}{4}$  =  $2\frac{1}{4}$  kg

(e)  $4000 + 200$  =  $\frac{4000}{1000} + \frac{200}{1000}$   
=  $4 + \frac{1}{5}$  =  $4\frac{1}{5}$  kg.

(f)  $8000 + 750$  =  $\frac{8000}{1000} + \frac{750}{1000}$   
=  $8 + \frac{3}{4}$  =  $8\frac{3}{4}$  kg

Pg 85 Ex 17.3

(a)  $(1350 + 3400)$  = 4750 g = 4 kg 750 g

(b)  $(3270 + 2850)$  = 6120 g = 6 kg 120 g

(c)  $(4780 + 5830)$  = 10610 = 10 kg 610 g

(d)  $(4760 - 2320)$  = 2440 = 2 kg 440 g.

(e)  $(4150 - 2550)$  = 1600 = 1 kg 600 g.

(f)  $(7300 - 2455)$  = 4845 = 4 kg 845 g

Pg 86 Ex 17.4

1) (a)  $(530 \times 4)$  = 2120 = 2 kg 120 g.

(b)  $(1530 \times 6)$  = 9180 = 9 kg 180 g.

(c)  $(3470 \times 3)$  = 10410 = 10 kg 410 g.

(d)  $(2420 \times 5)$  = 12100 = 12 kg 100 g.

Ex 17.5

(a)  $(400 \div 2)$  = 200 g.

(b)  $(5750 \div 5)$  = 1150 g.

(c)  $(13550 \div 5)$  = 2710 g = 2 kg 710 g.

(d)  $(12462 \div 6)$  = 2077 g = 2 kg 77 g.

Pg 87 Ex 17.6 Harder questions.

1)  $6\frac{1}{2} \text{ kg} = 6500 \text{ g}$ .  
 Skiva = 30250 g.  
 (i) Adi =  $(30250 - 6500) = 23750 \text{ g}$   
 $= 23 \text{ kg } 750 \text{ g} \leftarrow$

(ii) Total =  $(30250 + 23750) = 54000 \text{ g}$   
 $= 54 \text{ kg} \leftarrow$

2) Joelle = 10350 g.  
 1 packet =  $\left(\frac{10350}{5}\right) = 2070$   
 $= 2 \text{ kg } 070 \text{ g} \leftarrow$

3) 70 kg = 70000 g.  
 No of packets =  $\frac{70000}{700} = 100 \leftarrow$

Units 8

Pg 88 Ex 18.1

(a) 600 c (b) 1500 c (c) 700 c (d) 2250 c

Ex 18.2

(a)  $\frac{700}{100} = \text{Rs } 7$ .

(b)  $\frac{300}{100} + \frac{20}{100} = \text{Rs } 3.50$ .

(c)  $\frac{1000}{100} + \frac{25}{100} = 10 + 0.25 = 10.25 \leftarrow$

(d)  $\frac{600}{100} + \frac{75}{100} = 6 + 0.75 = \text{Rs } 6.75$ .

Pg 89 Ex 18.3

(a) Rs 6.45 (b) 159.20

(c) Rs 510.50 (d) Rs 14.75

Pg 90 Ex 18.4

(a) Rs 9.25 (b) 13.75

(c) 104.25 (d) Rs 174.50

Pg 90 Ex 18.5

(a)  $(60 \times 5) = \text{Rs } 300$ .

(b)  $(90 \times 3.50) = \text{Rs } 315$ .

(c)  $(25 \times 6) = \text{Rs } 150$ .

(d)  $(5.25 \times 30) = \text{Rs } 157.50$ .

Pg 91 Ex 18.6

(a) Rs 42.

(b) Rs 153.

(c) Rs 90.40

(d) Rs 241.50

Pg 92 Ex 18.7

a) loss :  $(100 - 70) = \text{Rs } 30$ .

b) loss :  $(300 - 210) = \text{Rs } 90$ .

c) Profit :  $(90 - 70) = \text{Rs } 20$ .

d) Profit :  $(500 - 400) = \text{Rs } 100$ .

e) loss :  $(450 - 350) = \text{Rs } 100$ .

(f) Profit =  $(1500 - 1300) = 200$ .

2) Profit =  $(600 - 400) = \text{Rs } 200$ .

3) loss =  $(600 - 350) = \text{Rs } 250$ .

Pg 93 Ex 18.8

1. S.P =  $(200 + 100) = \text{Rs } 300$ .

2. S.P =  $(500 + 100) = \text{Rs } 600$ .

3. S.P =  $(1000 - 250) = \text{Rs } 750$ .

4) S.P =  $(9000 - 3750) = \text{Rs } 5250$ .

Pg 94 Ex 18.9

1) B.P =  $(1200 - 300) = \text{Rs } 900$ .

2) B.P =  $(750 - 150) = \text{Rs } 600$ .

3) B.P =  $(625 + 90) = \text{Rs } 715$ .

4) B.P =  $(1150 + 150) = \text{Rs } 1300$ .

Pg 95 Ex 18.10

1) spent =  $(37.85 + 29.90) = 67.75$

left =  $(200 - 67.75) = \text{Rs } 132.25 \leftarrow$

2)  $(45675 \times 2) = \text{Rs } 91350 \leftarrow$

3) B.P =  $(150 \times 3) = \text{Rs } 450$ .

100 apples =  $(100 \times 6) = 600$ .

50 apples =  $(50 \times 3.50) = 175$ .

S.P =  $(600 + 175) = 775$ .

Profit =  $(775 - 450) = \text{Rs } 325 \leftarrow$

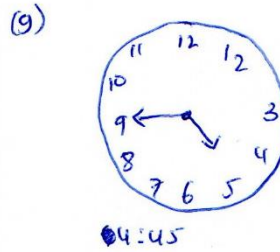
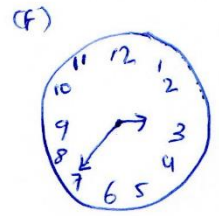
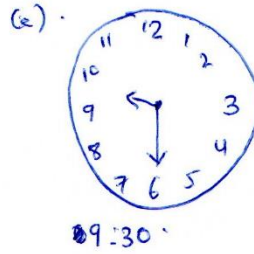
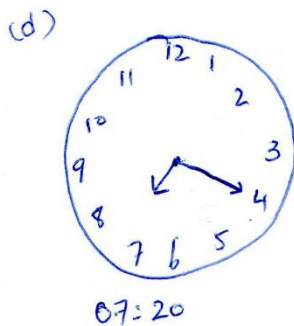
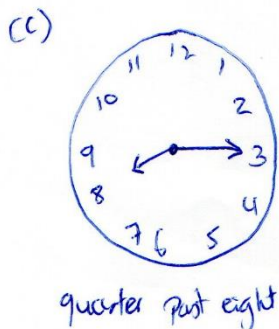
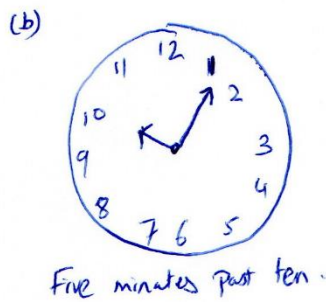
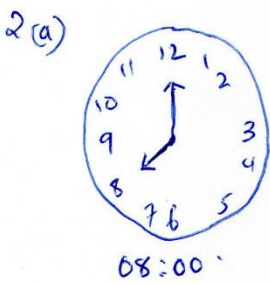


Pg 95 Ex 4

$B.P = (240 \times 4) = \text{Rs } 960.$   
 $S.P \text{ of } 150 \text{ eggs} = (150 \times 6) = \text{Rs } 900.$   
 $\text{Profit} = \text{Rs } 315.$   
 $\therefore \text{Total } S.P = (960 + 315) = 1275.$   
 $\text{Remainder eggs} = (1275 - 900) = 375.$   
 $(240 - 150 - 15) = 375.$   
 $75 \text{ eggs} = 375.$   
 $1 \text{ egg} = \frac{375}{75} = \text{Rs } 5.$

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- (a) 9:00 , nine o'clock.  
 (b) 5:05 , Five <sup>minutes</sup> past five.  
 (c) 1:15 , quarter past one.  
 (d) 10:20 , twenty <sup>minutes</sup> past ten.  
 (e) 11:30 , Half past eleven.  
 (f) 3:35 , twenty five <sup>minutes</sup> to four.  
 (g) 11:45 , quarter to twelve.  
 (h) 5:50 , ten minutes to six.



Pg 99 Ex 19.2

(a)  $(5 \times 60) = 300$       (b)  $(10 \times 60) = 600.$   
 (c)  $(2 \times 60) + 25 = 140 + 25 = 165$   
 (d)  $(4 \times 60) + 10 = 240 + 10 = 250.$   
 (e)  $(\frac{1}{4} \times 60) = 15.$   
 (f)  $(\frac{2}{5} \times 60) = 24.$   
 (g)  $(3 \times 60) + (\frac{1}{10} \times 60) = 180 + 6 = 186.$   
 (h)  $(5 \times 60) + (\frac{3}{4} \times 60) = (300 + 45) = 345$

Pg 100 Ex 19.3

(a)  $\frac{120}{60} = 2 \text{ h.}$   
 (b)  $\frac{300}{60} = 5 \text{ h.}$   
 (c)  $\frac{30}{60} = \frac{1}{2} \text{ h.}$   
 (d)  $\frac{45}{60} = \frac{3}{4} \text{ h.}$   
 (e)  $\frac{450}{60} = \frac{15}{2} = 7\frac{1}{2} \text{ h.}$   
 (f)  $\frac{375}{60} = \frac{25}{4} = 6\frac{1}{4} \text{ h.}$

Pg 100 Ex 19.4

(a) 
$$\begin{array}{r} 230 \\ 115 \\ \hline 345 \end{array}$$
 3h 45min. ←

(b) 
$$\begin{array}{r} 1 \\ 45 \\ 55 \\ \hline 100 \\ +1 \\ \hline 60 \\ \hline 140 \end{array}$$
 1h 40min ←

$$\begin{array}{r} \text{(c)} \quad 2 \ 35 \\ \quad \quad 3 \ 45 \\ \hline \quad \quad 5 \ 80 \\ + 1 \ 60 \\ \hline \quad \quad 6 \ 20 \end{array}$$

6h 20min ←

$$\begin{array}{r} \text{(d)} \quad 5 \ 50 \\ \quad \quad 2 \ 15 \\ \hline \quad \quad 7 \ 65 \\ + 1 \ 60 \\ \hline \quad \quad 8 \ 05 \end{array}$$

8h 05min ←

Pg 101 Ex 19.5

$$\begin{array}{r} \text{(1)} \quad 09 \ 45 \\ \quad \quad 40 \\ \hline \quad \quad 9 \ 85 \\ + 1 \ 60 \\ \hline \quad \quad 10 \ 25 \end{array}$$

10:25am ←

$$\begin{array}{r} \text{(2)} \quad + 10 \ 35 \\ \quad \quad 1 \ 40 \\ \hline \quad \quad 11 \ 75 \\ + 1 \ 60 \\ \hline \quad \quad 12 \ 15 \end{array}$$

12:15 p.m.

$$\begin{array}{r} \text{(3)} \quad 09:25 \\ \quad \quad 2:45 \\ \hline \quad \quad 11:70 \\ + 1:60 \\ \hline \quad \quad 12:10 \end{array}$$

12:10 a.m.

Ex 19.6

$$\begin{array}{r} \text{(a)} \quad 4 \ 55 \\ \quad \quad 2 \ 30 \\ \hline \quad \quad 2 \ 25 \end{array}$$

2h 25min

$$\begin{array}{r} \text{(b)} \quad 2 \ 60 \\ \quad \quad 8 \ 35 \\ \hline \quad \quad 1 \ 55 \\ \quad \quad 1 \ 40 \\ \hline \quad \quad 1 \ 40 \end{array}$$

1h 40min

$$\begin{array}{r} \text{(c)} \quad 3 \ 60 \\ \quad \quad 4 \ 20 \\ \hline \quad \quad 1 \ 35 \\ \quad \quad 2 \ 45 \\ \hline \quad \quad 2 \ 45 \end{array}$$

2h 45min

$$\begin{array}{r} \text{(d)} \quad 5 \ 60 \\ \quad \quad 8 \ 15 \\ \hline \quad \quad 2 \ 40 \\ \quad \quad 3 \ 35 \end{array}$$

3h 35min

Ex 19.7

$$\begin{array}{r} \text{(1)} \quad 09 \ 60 \\ \quad \quad 8 \ 60 \\ \hline \quad \quad 1 \ 45 \\ \quad \quad 7 \ 15 \end{array}$$

Time: 07:15 pm

$$\begin{array}{r} \text{(2)} \quad 10 \ 60 \\ \quad \quad 7 \ 25 \\ \hline \quad \quad 07 \ 45 \\ \quad \quad 3 \ 40 \end{array}$$

Time 3h 40min.

$$\begin{array}{r} \text{(3)} \quad 9 \ 60 \\ \quad \quad 70 \ 00 \\ \hline \quad \quad 05 \ 50 \\ \quad \quad 1 \ 10 \end{array}$$

Time 1h 10min.

$$\begin{array}{r} \text{(4)} \quad 16 \ 60 \\ \quad \quad 17 \ 25 \\ \hline \quad \quad 13 \ 40 \\ \quad \quad 3 \ 45 \end{array}$$

3h 45min ←

Ex 19.8

(a)  $70 \times 5 = 350 \text{ min}$   
 $300 + 50 = 6 \text{h } 50 \text{min}$

$$\begin{array}{r} \text{(b)} \quad 2 \ 35 \\ \quad \quad \times 3 \\ \hline \quad \quad 6 \ 105 \\ + 1 \ 60 \\ \hline \quad \quad 7 \ 45 \end{array}$$

7h 45min

$$\begin{array}{r} \text{(c)} \quad 1 \ 30 \\ \quad \quad \times 4 \\ \hline \quad \quad 4 \ 120 \\ + 2 \ 120 \\ \hline \quad \quad 6 \ 0 \end{array}$$

6h

$$\begin{array}{r} \text{(d)} \quad 3 \ 40 \\ \quad \quad \times 5 \\ \hline \quad \quad 15 \ 200 \\ + 3 \ 180 \\ \hline \quad \quad 18 \ 20 \end{array}$$

18h 20min.

Pg 104 Ex 19.9

(a)  $\frac{240}{6} = 40 \text{ min}$  ← (b)  $3 \text{h } 15 \text{min} = (3 \times 60) + 15$   
 $= 180 + 15$   
 $= 195$   
 $195 \div 3 = 65 \text{ min}$  ←

(c)  $(2 \times 60) + 45 = 120 + 45 = 165$  ←  $165 \div 3 = 33 \text{ min}$  ←  
 (d)  $(5 \times 60) + 44 = 300 + 44 = 344$   
 $344 \div 8 = 43 \text{ min}$  ←

Ex 19.10

(a)  $(6 \times 60) = 360 \text{ s}$  (b)  $(15 \times 60) = 900 \text{ s}$   
 (c)  $(\frac{1}{4} \times 60) = 15 \text{ s}$  (d)  $(\frac{3}{5} \times 60) = 36 \text{ s}$   
 (e)  $(3 \times 60) + (\frac{1}{4} \times 60) = 180 + 15 = 195 \text{ s}$   
 (f)  $(4 \times 60) + (\frac{3}{4} \times 60) = 240 + 45 = 285 \text{ s}$

Pg 106 Ex 19.11

(a)  $\frac{180}{60} = 3$  (b)  $\frac{210}{60} = \frac{21}{6} = \frac{7}{2}$  or  $3\frac{1}{2}$

(c)  $\frac{320}{60} = \frac{32}{6} = \frac{16}{3}$  or  $5\frac{1}{3}$  (d)  $\frac{450}{60} = \frac{45}{6} = \frac{15}{2} = 7\frac{1}{2} \text{ min}$

Ex 19.12

$$\begin{array}{r} \text{(1)} \quad 12 \ 60 \\ \quad \quad 12 \ 00 \\ \hline \quad \quad - 8 \ 30 \\ \quad \quad 3 \ 30 \end{array}$$

$3 \text{h} = (60 \times 3) = 180 \text{ min}$   
 $\frac{180}{4} = 45 \text{ min}$  ←

$$\begin{array}{r} 3 \ 30 \\ - 30 \\ \hline 3 \ 00 \end{array}$$

$$\begin{array}{r} \text{(2)} \quad 11 \ 60 \\ \quad \quad 12:00 \\ \hline \quad \quad - 08:45 \\ \quad \quad 3:15 \end{array}$$

$\frac{315}{5 \ 30} = 5 \text{h } 30 \text{min}$  ←

Unit 20 Pg 107 Ex 20.1

(a) 5 cakes. (b) Julian (c) Dick.

(d)  $(50 - 25) = 25$  (e)  $\square \square \square$

(f)  $(40 + 30 + 50 + 25 + 40) = 185$

Pg 108 Ex 20.2

(a) 1 flower (b) 10 flowers  
 (c) Sunday (d) 5 (e)  $(8 \times 2) = 16 \text{ flowers}$   
 (f)  $(5 + 16 + 10 + 8 + 13) = 52$

Pg 109 Ex 21.1

(a) 4 (b)  $(6 + 8) = 14$  (c) Brinda.

(d)  $(6 + 12 + 4 + 8) = 30$

2(a) 8 (b) Bus (c) car.

(d) Van : Foot  
 2 : 8  
 1 : 4

3(a) 14 (b) Ford (c) Toyota and BMW.

(d)  $(19 - 14) = 5$

(e)  $(14 + 23 + 19 + 17 + 12 + 17 + 22) = 124$

(f) Nissan = 12  
 Total = 124

Fraction =  $\frac{12}{124} = \frac{6}{62} = \frac{3}{31}$  ←