Ch-9 - Fractions

1- a) Unlike

b) Mixed numbers

c) Improper

d) 17

e) 1

f) 5

g) 8 halves

h) Proper

i) Like

j) Equivalent

a) $\frac{3}{5}$ of $25 = \frac{3}{5} \times 25 = \frac{75}{5}$ $75 \div 5 = 15$

b) $\frac{19}{2} = 2\overline{)19}$ (9) -18 (remainder 1) $= 9\frac{1}{2}$

c) $6\frac{2}{9} = 9 \times 6 + 2 = \frac{56}{9}$

d) ans) $\frac{3}{4} \textcircled{>} \frac{2}{5}$ $= \frac{3 \times 5}{4 \times 5} = \frac{15}{20}$

$\frac{2 \times 4}{5 \times 4} = \frac{8}{20}$ $\frac{15}{20} \textcircled{>} \frac{8}{20}$

34) $2\frac{5}{13} + \frac{7}{13} + 3\frac{9}{26} = \frac{31}{13} + \frac{7}{13} + \frac{37}{26}$

$\frac{31}{13} \times \frac{2}{2} = \frac{62}{26}$

$\frac{7}{13} \times \frac{2}{2} = \frac{14}{26}$

$\frac{37}{26} \times \frac{1}{1} = \frac{37}{26}$

13 | 13, 13, 26

2 | 1, 1, 2

1, 1, 1

LCM = 26

$\frac{62 + 14 + 37}{26}$

$\frac{113}{26}$ $\quad 4\frac{9}{26}$

b) $5\frac{7}{9} - 9\frac{5}{7} = \frac{52}{9} - \frac{68}{7}$

$\frac{68 \times 9}{7 \times 9} = \frac{612}{63}$

$\frac{52 \times 7}{9 \times 7} = \frac{364}{63}$

$\frac{364 - 612}{63} = \frac{-248}{63} = -3\frac{59}{63}$

3 | 9, 7
7 | 3, 7
3 | 3, 1
1, 1

c) $\frac{2}{5} \times 3\frac{3}{8} \times 3\frac{1}{2} = \frac{8}{30}$

d) $\frac{3}{5} + \frac{1}{2} - \frac{3}{4}$

$6 \times 2 = 12$
$10 \times 2 = 20$

$\frac{5 \times 2}{10 \times 2} = \frac{10}{20}$

$3 \times 5 = 15$

$= \frac{12 + 10 - 15}{20}$

$= \frac{7}{20}$

e) $\frac{7}{2} \div \frac{7}{1} = \frac{\cancel{7}^{1}}{\cancel{2}} \times \frac{1}{\cancel{7}} = \frac{1}{2}$

So the length of each meter is

$\frac{1}{2}$ m