

HW Set 24

Section 6.1

p137

② a) (Primary Math 4A, p45)

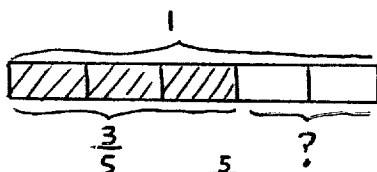
Problem 9 a) $\frac{5}{8}$ b) $\frac{5}{12}$ c) $\frac{7}{9}$ f) $\frac{3}{4}$ i) $\frac{5}{6}$ j) $\frac{5}{9}$

b) (P.M. 4A, p49)

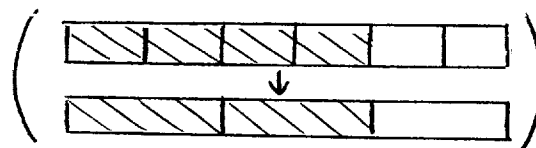
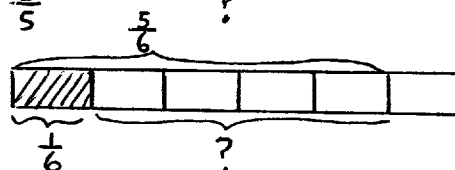
Problem 10 a) $\frac{2}{9}$ b) $\frac{3}{8}$ c) $\frac{1}{10}$ f) $\frac{1}{2}$ i) $\frac{1}{4}$ j) $\frac{1}{4}$

c) (P.M. 4A, p50)

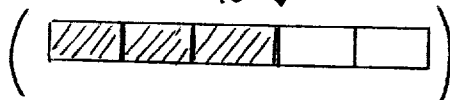
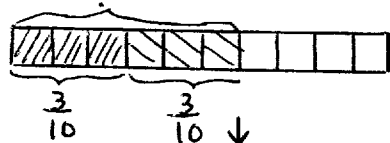
Problem 4 a) $1 - \frac{3}{5} = \frac{2}{5}$



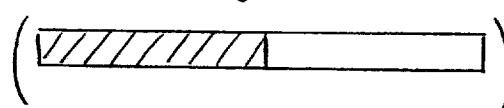
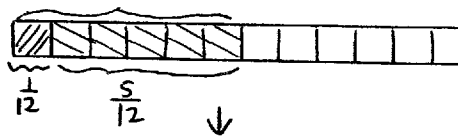
b) $\frac{5}{6} - \frac{1}{6} = \frac{4}{6} = \frac{2}{3}$



Problem 5 a) $\frac{3}{10} + \frac{3}{10} = \frac{6}{10} = \frac{3}{5}$

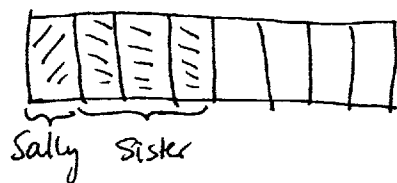


b) $\frac{1}{12} + \frac{5}{12} = \frac{6}{12} = \frac{1}{2}$



③ (P.M. 4A, p50)

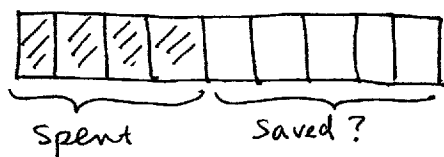
Prob 6)



$$\frac{1}{8} + \frac{3}{8} = \frac{4}{8} = \frac{1}{2}$$

they ate $\frac{1}{2}$ altogether.

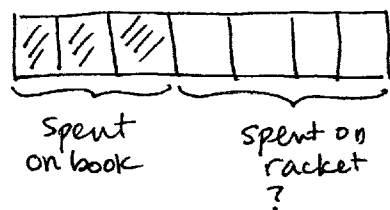
Prob 7)



$$1 - \frac{4}{9} = \frac{9}{9} - \frac{4}{9} = \frac{5}{9}$$

He save $\frac{5}{9}$ of his money.

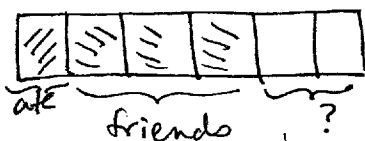
Prob 8)



$$1 - \frac{3}{7} = \frac{7}{7} - \frac{3}{7} = \frac{4}{7}$$

He spent $\frac{4}{7}$ of his money on the racket.

Prob 9)



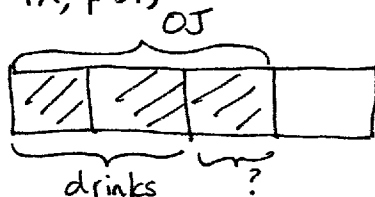
$$\frac{1}{6} + \frac{3}{6} = \frac{4}{6}$$

$$1 - \frac{4}{6} = \frac{6}{6} - \frac{4}{6} = \frac{2}{6} = \frac{1}{3}$$

She had $\frac{1}{3}$ of the pie left.

(P.M. 4A, p 51)

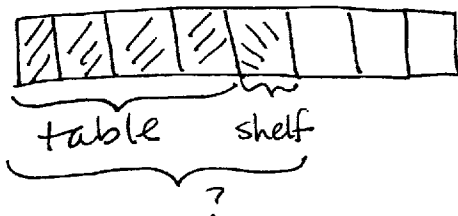
Prob 6)



$$\frac{3}{4} - \frac{1}{4} = \frac{3}{4} - \frac{2}{4} = \frac{1}{4}$$

She has $\frac{1}{4}$ left.

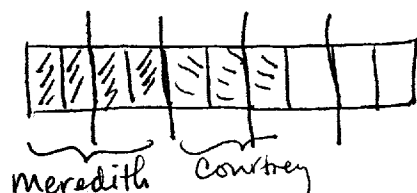
Prob 7)



$$\frac{1}{2} + \frac{1}{8} = \frac{4}{8} + \frac{1}{8} = \frac{5}{8}$$

He used $\frac{5}{8}$ altogether.

Prob 8) a)



Meredith bought $\frac{2}{5} = \frac{4}{10}$ kg.

Courtney bought $\frac{2}{5} - \frac{1}{10} = \frac{4}{10} - \frac{1}{10} = \frac{3}{10}$ kg.

$$b) \quad \frac{2}{5} + \frac{3}{10} = \frac{4}{10} + \frac{3}{10} = \frac{7}{10}$$

They bought $\frac{7}{10}$ kg total.

④ (P.M. 4A, p 66-69)

$$a) 12) \quad \frac{5}{8}, \frac{1}{3}, \frac{1}{6}, \frac{1}{2}, \frac{3}{4}, \frac{1}{2}$$

$$13) \quad \frac{4}{9}, \frac{2}{3}$$

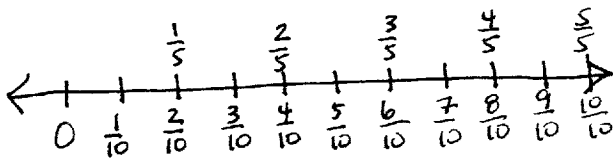
$$14) \quad \frac{1}{12}, \frac{1}{3}, \frac{3}{5}, \frac{4}{4}, \frac{3}{2}$$

$$15) \quad 6, 18, 2, 3$$

$$16) \quad \frac{4}{5}, \frac{1}{6}, 1\frac{1}{3}, 2\frac{1}{4}$$

b) Equivalent Fractions

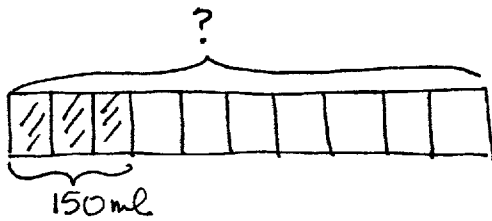
⑤



The point on the number line where $\frac{4}{5}$ lies is the same as the point where $\frac{8}{10}$ lies.

⑥

a)



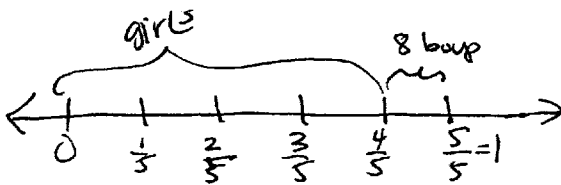
$$3 \text{ units} = 150 \text{ ml}$$

$$1 \text{ unit} = 50 \text{ ml}$$

$$10 \text{ units} = 500 \text{ ml}$$

The bottle held 500 ml of oil.

b)

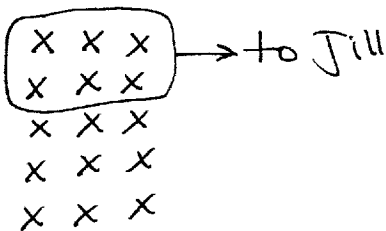


$$1 \text{ unit} = 8 \text{ children}$$

$$5 \text{ units} = 40 \text{ children}$$

There are 40 children in the choir.

c)

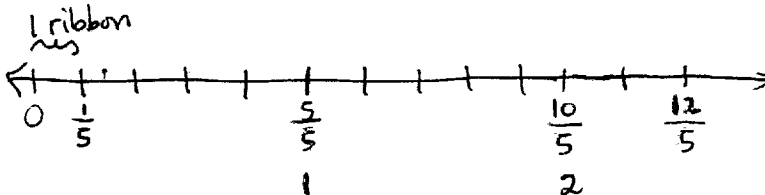


$$1 \text{ unit} = 3 \text{ stamps}$$

$$2 \text{ units} = 6 \text{ stamps}$$

He gave Jill 6 stamps.

d)

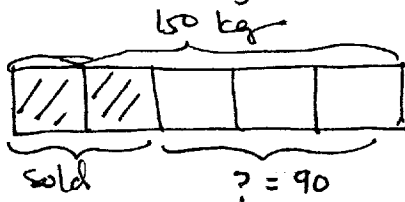


$$1 \text{ unit} = \frac{1}{5} \text{ meter}$$

$$12 \text{ units} = \frac{12}{5} \text{ meters}$$

She use $2\frac{2}{5}$ meters of ribbon.

e)



$$5 \text{ units} = 150 \text{ kg}$$

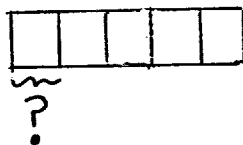
$$1 \text{ unit} = 30 \text{ kg}$$

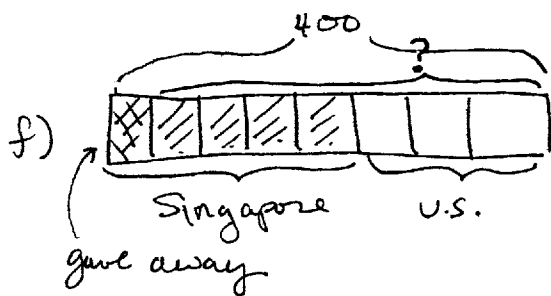
$$\text{So } 3 \text{ units} = 90 \text{ kg}$$

$$90 \div 5 = 18 \text{ kg}$$

Each bag of rice weighed 18 kg

Next





8 units = 400 stamps
 1 unit = 50 stamps
 7 units = 350 stamps

He had 350 stamps left.

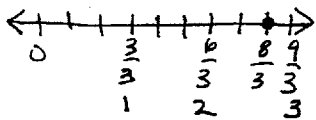
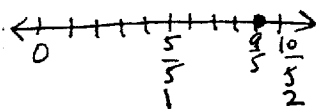
- ⑦ $\frac{1}{6} > \frac{1}{7}$, yes, no, if the denominator is increased by 1
 you get an even smaller fraction
 $\frac{1}{n+1} < \frac{1}{n}$ for any counting number n

HW set 25

Section 6.2

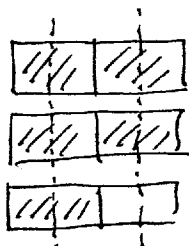
p 142-143

- ① a) (PM 4A p.57)
 Prob 8a) $\frac{9}{5}$ Prob 8b) $\frac{8}{3}$

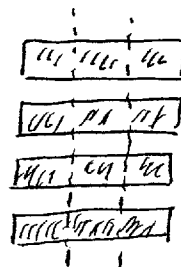


- b) PM 4A p.57

Prob 10a) $\frac{10}{4} = \frac{5}{2}$

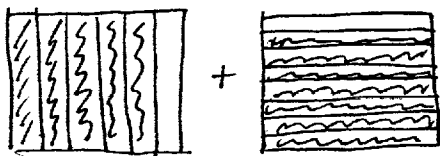


Prob 10b) $\frac{12}{3} = 4$

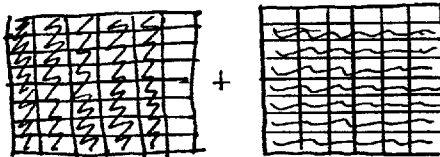


- ③ (P.M 5A p 40)

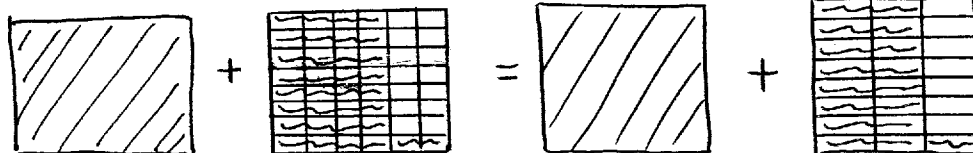
a) Prob 1c) $\frac{5}{6} + \frac{7}{8}$



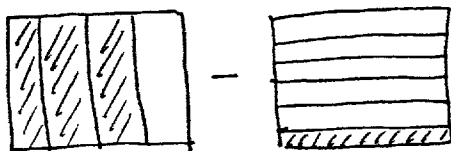
$= \frac{40}{48} + \frac{42}{48}$



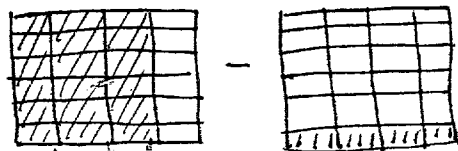
$= \frac{82}{48} = \frac{41}{24}$
 $(= 1\frac{17}{24})$



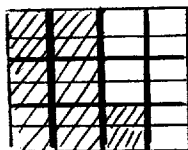
Prob 2c) $\frac{3}{4} - \frac{1}{6}$



$= \frac{18}{24} - \frac{4}{24}$



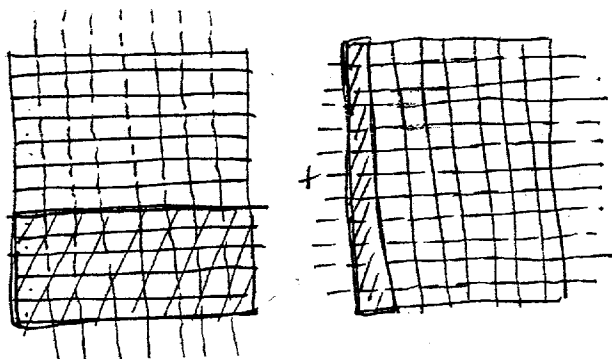
$= \frac{14}{24} = \frac{7}{12}$



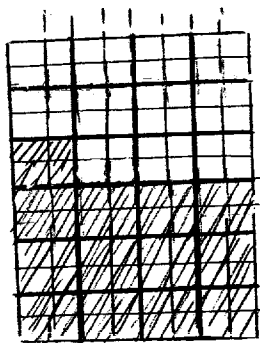
Prob 3c)

$\frac{5}{12} + \frac{1}{8}$

$= \frac{40}{96} + \frac{12}{96}$

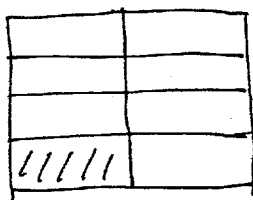


$= \frac{52}{96} = \frac{13}{24}$



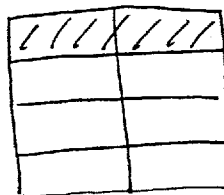
b) (P.M. 5A, p 40)

Prob 7) a)



Mary

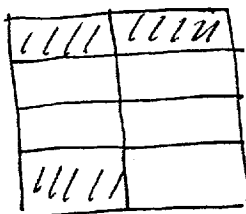
+



Peter

$\frac{1}{8} + \frac{1}{4}$
 $= \frac{1}{8} + \frac{2}{8}$
 $= \frac{3}{8}$

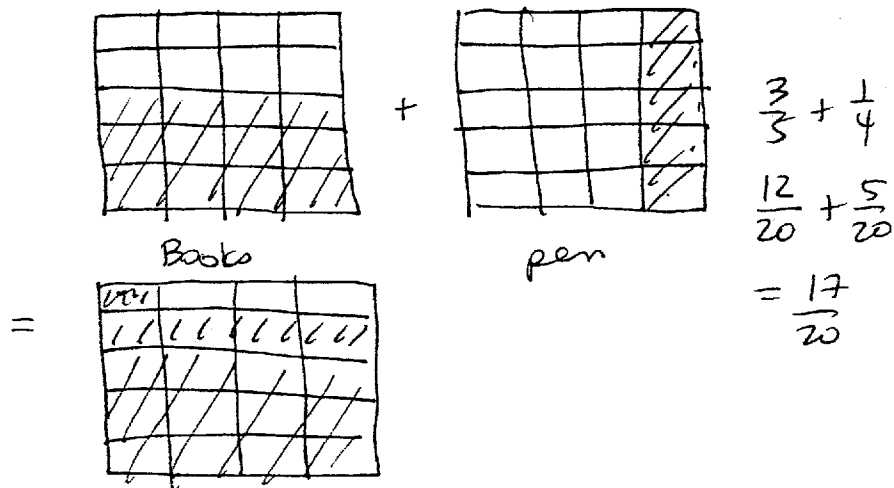
=



They ate $\frac{3}{8}$ together.

b) $\frac{1}{4} - \frac{1}{8} = \frac{2}{8} - \frac{1}{8} = \frac{1}{8}$ Peter ate $\frac{1}{8}$ more.

Prob 8) a)



b) He has $1 - \frac{12}{20} = \frac{20}{20} - \frac{12}{20} = \frac{8}{20}$ left

④ a) $28\frac{2}{7} - 3\frac{6}{7} = 27\frac{9}{7} - 3\frac{6}{7} = 24\frac{3}{7}$ Better! $28\frac{2}{7} - 3\frac{6}{7} = 28\frac{2}{7} - 4 = 24\frac{2}{7}$

b) $9\frac{1}{6} - 5\frac{5}{6} = 8\frac{7}{6} - 5\frac{5}{6} = 3\frac{2}{6} = 3\frac{1}{3}$ Better! $9\frac{1}{6} - 5\frac{5}{6} = 9\frac{2}{6} - 6 = 3\frac{2}{6} = 3\frac{1}{3}$

c) $\left(1\frac{3}{4} + 4\frac{5}{11}\right) + \left(2\frac{8}{11} + 5\frac{1}{4}\right)$
 $\left(1\frac{3}{4} + 5\frac{1}{4}\right) + \left(4\frac{5}{11} + 2\frac{8}{11}\right)$
 $6\frac{4}{4} + 6\frac{13}{11}$
 $7 + 7\frac{2}{11} = 14\frac{2}{11}$

d) $12\frac{1}{8} - 4\frac{5}{8}$

$= 11\frac{9}{8} - 4\frac{5}{8} = 7\frac{4}{8} = 7\frac{1}{2}$

OR: $12\frac{1}{8} - 4\frac{5}{8} = 12\frac{4}{8} - 5 = 7\frac{4}{8} = 7\frac{1}{2}$

e) $\frac{4}{9} + \left(\frac{3}{5} + 3\frac{5}{9}\right)$

$= \left(\frac{4}{9} + 3\frac{5}{9}\right) + \frac{3}{5} = 4 + \frac{3}{5} = 4\frac{3}{5}$

⑦ a) $\frac{735}{37} = 19\frac{32}{37}$

$$\begin{array}{r} 37 \overline{) 735} \\ 37 \\ \hline 365 \\ 333 \\ \hline 32 \end{array}$$

b) $\frac{4271}{9} = 474\frac{5}{9}$

$$\begin{array}{r} 9 \overline{) 4271} \\ 36 \\ \hline 67 \\ 63 \\ \hline 41 \\ 36 \\ \hline 5 \end{array}$$

⑧ To answer this, think of division in terms of fractions

(FRACTION RULE 3: $a \div b = \frac{a}{b}$)

$46 \div 6 = \frac{46}{6} = 7\frac{4}{6} = 7\frac{2}{3}$

$23 \div 3 = \frac{23}{3} = 7\frac{2}{3}$