

① (P.M. 5A, p55) Answers only:

Prob 4 $\frac{4}{5} \div 2 = \frac{4}{5} \cdot \frac{1}{2} = \frac{2}{5} \text{ m}$

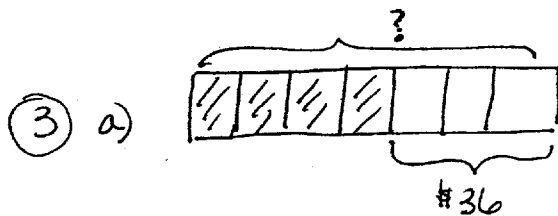
Prob 5 $\frac{4}{5} \div 4 = \frac{4}{5} \cdot \frac{1}{4} = \frac{1}{5}$ Each club got $\frac{1}{5}$ of the money

Prob 6 $\frac{3}{10} \div 6 = \frac{3}{10} \cdot \frac{1}{6} = \frac{1}{20} \text{ kg}$

Prob 7 $\frac{2}{5} \div 4 = \frac{2}{5} \cdot \frac{1}{4} = \frac{1}{10} \text{ pt}$

Prob 8 $\frac{3}{4} \div 4 = \frac{3}{4} \cdot \frac{1}{4} = \frac{3}{16} \text{ m}$

Prob 9 $\frac{3}{4} \div 6 = \frac{3}{4} \cdot \frac{1}{6} = \frac{1}{8} \text{ kg}$

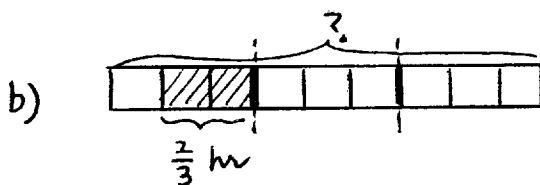


3 units = \$36

1 unit = \$12

7 units = \$84

Rita had \$84 to start.



2 units = $\frac{2}{3} \text{ hrs}$

1 unit = $\frac{1}{2} \cdot \frac{2}{3} = \frac{1}{3} \text{ hr}$

So 9 units = $9 \cdot \frac{1}{3} = 3 \text{ hrs}$

It takes 3 hrs to fill the entire pool.

alt If $\frac{2}{9}$ pool is filled in $\frac{2}{3} \text{ hrs}$, $\leftarrow \frac{1}{3} - \frac{1}{9}$ is $\rightarrow$ divide by 2

then $\frac{1}{9}$ pool is filled in $\frac{1}{3} \text{ hrs}$.

Therefore $\frac{9}{9}$ of pool is filled in $\frac{9}{3}$ or 3 hrs. $\rightarrow$ mult by 9

④ a) we're told that $\frac{3}{5}$ of the book is 186 pages $\rightarrow$ divide by 3
 so, $\frac{1}{5}$ of the book is 62 pages $\rightarrow$ mult by 5
 hence, one book is 310 pages.

b) we're told that $\frac{3}{10}$ of the truck is $\frac{2}{3}$ tons of dirt $\rightarrow$ divide by 3
 so, $\frac{1}{10}$ of the truck is $\frac{2}{9}$ tons of dirt $\rightarrow$ mult by 10
 hence, the truck holds $\frac{20}{9}$ tons of dirt.

⑤ a) Let t be the total number of coins

$\frac{3}{7}$ of coins are nickels, so $\frac{4}{7}$ of coins are pennies.

$$\text{So } \frac{4}{7}t = 36$$

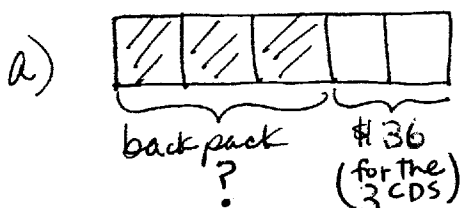
$$\text{Mult thru by } \frac{7}{4}: t = 36 \times \frac{7}{4} = 9 \times 7 = 63 \text{ coins}$$

b) Let t be the number of hours to plow the field

So $\frac{2}{5}t = \frac{3}{4}$ ← note $\frac{2}{5}$ of a field should take $\frac{2}{5}$ of the total time to plow the entire field; so $\frac{2}{5}$ of t is $\frac{3}{4}$ hr

$$t = \frac{3}{4} \times \frac{5}{2} = \frac{15}{8} \text{ hrs} = 1\frac{7}{8} \text{ hrs}$$

⑥

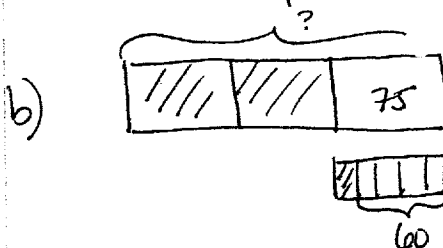


$$2 \text{ units} = 36$$

$$1 \text{ unit} = 18$$

$$3 \text{ units} = 54$$

The backpack costs \$54.



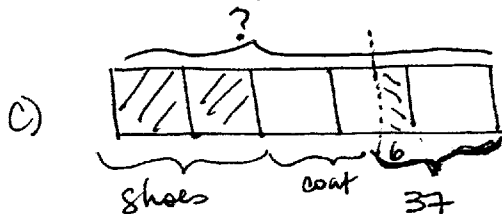
$$4 \text{ units} = 60$$

$$1 \text{ unit} = 15$$

$$5 \text{ units} = 75$$

$$\text{So, } 75 \times 3 = 225$$

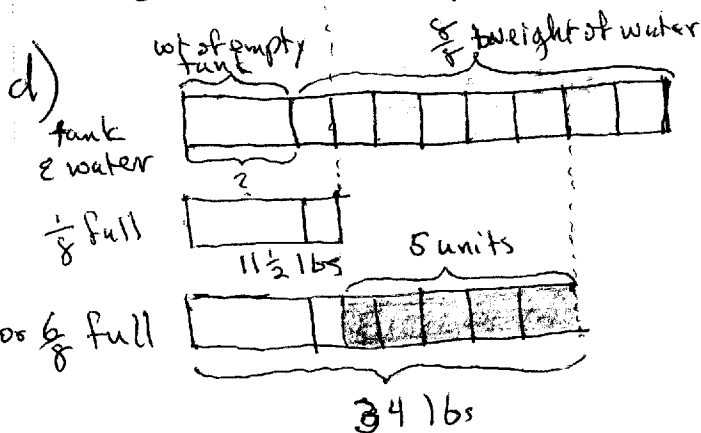
There were 225 cookies.



$$1 \text{ unit} = 37 - 6 = 31$$

$$5 \text{ units} = 31 \times 5 = 155$$

He had \$155.



1 unit = weight of water that fills $\frac{1}{8}$ of the tank (in pounds).

$$5 \text{ units} = 34 - 11\frac{1}{2} = 34\frac{1}{2} - 12 = 22\frac{1}{2} = \frac{45}{2}$$

$$1 \text{ unit} = \frac{45}{2} \div 5 = 4\frac{1}{2}$$

The weight of the empty tank is $11\frac{1}{2} - 4\frac{1}{2} \text{ lbs} = 7 \text{ lbs}$.

The empty tank weighs 7 lbs.