② An army camp has a 30 day stock of food for 900 soldiers. 150 soldiers leave the camp. Tell how many days same stock of food will be sufficient for soldiers?

Days	soldiers
30	900
x	750

$$\frac{x}{30} = \frac{900}{750}$$

$$x = \frac{36}{900} \times \frac{1}{30}$$

$$x = 36 \text{ days}$$

③ A fort had enough food for 80 soldiers for 60 days. How long would the food last if 20 more soldiers join after 15 days?

food for Soldiers	Days
80	60 − 15 = 45
100	x

$$\frac{x}{45} = \frac{80}{100}$$

$$x = \frac{4}{5} \times 45$$

$$x = 36 \text{ days}$$

15 days later = 51 days

① 14 cows eat 63kg grass in 18 days. How many cows will eat 770kg grass in 28 days?

Grass	Cows	Days
63	14	18
770	x	28

$$\frac{x}{14} = \frac{\overset{110}{\cancel{770}}}{\cancel{63}_{7}} \times \frac{\cancel{18}^{1}}{\cancel{28}_{14}}$$

$$x = \frac{110}{14} \times \cancel{14}$$

$$\boxed{x = 110 \text{ days}}$$

$$7\overline{)770}\ 11,\ 7,\ 07$$

② A food factory manufactures 560 fans in 7 days with 20 machines. How many fans would be manufactured in 12 days with 18 machines?

Fan	Days	Machines
560	7	20
x	12	18

$$\frac{x}{560} = \frac{6\cancel{12}}{7} \times \frac{\cancel{18}^{9}}{\cancel{20}_{\cancel{10}_{5}}}$$

$$x = \frac{54}{\cancel{35}_{7}} \times \cancel{560}^{112}$$

$$x = \frac{54 \times 112}{7}$$

$$x = \frac{6048}{7}$$

$$x = 8514$$

$$7\overline{)54}\ 6,\ 42,\ 12$$

$$2\overline{)18}\ 9,\ 18$$

$$5\overline{)560}\ 112,\ 5,\ 06,\ 5,\ 10$$

$$7\overline{)6048}\ 8514,\ 56,\ 44,\ 35,\ 98$$

$$7\overline{)54}\ 7,\ 5$$

③ The cost of 16 packets of salt, each weighing 900 grams is 84 dollars. What will be the cost of 27 packets of salt each weighing 1 Kg?

Packets	Weights	Dollars
16	900	84
27	1000	x

$$\frac{x}{84} = \frac{5}{\cancel{9}} \times \frac{3}{\cancel{16}}$$

$$x = \frac{15}{8} \times 84^{1.5}$$

$$x = 2.25 \text{ Dollars}$$

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④ if 270 Kg of corn would feed 42 horses for 21 days, for how many days would 360Kg of it feed 21 horses?

Corn	horses	Days
270	42	21
360	21	x

$$\frac{x}{21} = \frac{270}{360} \times \frac{42}{21}$$

$$x = \frac{27}{36} \times 21$$

$$x = 63/2$$

$$x = 3.15 \text{ Days}$$

A man left his property of Rs 640,000. A debt of Rs 40,000 was due to him and RS 5000 was spent on his burial. Distribute the amount b/w his ~~sons~~ widow, one daughter and two sons according to islamic law.

Total = 640,000/-

Debt = 40,000/-

Spent on burial = 5000/-

Total spent = 40,000 + 5000 = 45000/-

Remaining = 640,000 - 45000

= 595000/-

~~Widow~~

Widow : 2Sons : Daughter

1/8 : 4 : 1

0.125 : 4 : 1 5.125 parts.

widow share = $\frac{0.125}{5.125} \times 595000$

Son's share = $\frac{4}{5.125} \times 595000$

Daughter's share = $\frac{1}{5.125} \times 595000$