

⑥ quantity of water
reqd. per day = 4000×150

= 600000 litres
= $\frac{600000}{1000} \text{ m}^3$

Capacity of tank = lbh

= $20 \times 15 \times 6$
= 1800 m^3

no of days water last

= $\frac{1800}{600}$
= 3

no of boxes placed along
length = $\frac{40}{1.5}$

= 26.67
= 26

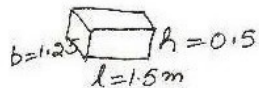
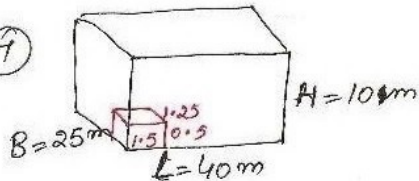
no of crates placed along
breadth = $\frac{25}{1.25}$

= 20

no of crates placed along
height = $\frac{10}{.5}$

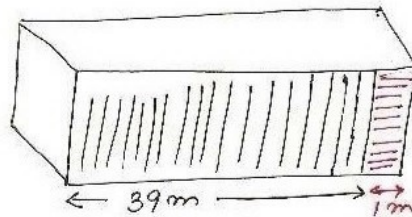
= 20

⑦

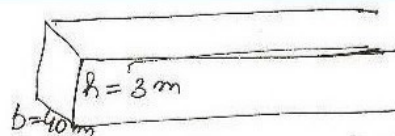


assuming crates are placed as shown in the figure

Total boxes = $26 \times 20 \times 20$
= 10400



according to assumed placement of crates 1m space is left empty along length



distance travel. by water in a minute

= $\frac{2}{60} \text{ km}$

= $\frac{2}{360} \times 1000 \text{ m}$

= $\frac{100}{3} \text{ m}$

volume of water which falls in sea

= lbh

= $\frac{100}{3} \times 40 \times 3$

= 4000 m^3

= 4000 kl