

- (i) Show him by letter K on the figure 1 the position where the tap can be put.
 - (ii) Explain to the restaurant owner on the choice of position K.
- (c) What advice would you give to the restaurant owner on the measures he would ensure for the tank stand to withstand the weight of the tank for a long time.

Item 5:

An investor from Kenya wanted to setup a factory in Uganda producing cooking equipments. The investor was wondering whether he will get the materials to be used in the making of equipments. When he went for consultations, he realized that the materials can be got.

He went ahead to look for the manager who was a specialist and the manager told him that cooking equipments require handles so as to be removed from fire.

A man who works in the factory told his wife that for him he will always take a bathe with warm water and the wife took it as a habit to provide warm water for his bathe. One day she boiled water for his bathe and she measured the temperature and was found to be 60°C , she took the water to the bathroom and provided another water at 20°C of the same mass.

Task:

As a physic learner:-

- (a) Advise the investor on the materials he should look for to suit the work he wants.
 - (b) Advise the man on what to do to get the required warm water.
 - (c) What is the temperature of warm water for this man to bathe.
- Specific heat capacity of water $= 4200 \text{ J kg}^{-1} \text{ K}^{-1}$