

**144 cartons of Coke Cans and 90 cartons of Pepsi Cans are to be stacked in a canteen. If each stack is of the same height and is to contain cartons of the same drink, what would be the greatest number of cartons each stack would have?**

**Solution:**

The greatest number of cartons each stack would have is the HCF of 144 and 90.

By Euclid's Division Algorithm

$$144 = 90 \times 1 + 54$$

$$90 = 54 \times 1 + 36$$

$$54 = 36 \times 1 + 18$$

$$36 = 18 \times 2 + 0$$

$$\text{HCF} = 18$$

$\therefore$  Number of cartons each stack would have = 18