

Imam Ali ibn Abi Taleb's (as) Mathematical Brilliance: Dividing 17 Camels

A person was about to die, and before dying he wrote his Will which went as follows:

"I have 17 Camels, and I have three sons. Divide my Camels in such a way that my eldest son gets half of them, the second one gets $\frac{1}{3}$ rd of the total and my youngest son gets $\frac{1}{9}$ th of the total number of Camels."



After his death when the relatives read his will they got extremely perplexed and said to each other that how can we divide 17 camels like this.

So after a long hard thought they decided that there was only one man in Arabia who could help them: "Imam Ali ibn Abi Taleb (as)."

So they all came to the door of Imam Ali ibn Abi Taleb (as) and put forward their problem.

Imam Ali ibn Abi Taleb (as) said, "Ok, I will divide the camels as per the man's will."

Imam Ali ibn Abi Taleb (as) said, "I will lend one of my camels to the total which makes it 18 ($17+1=18$), now lets divide as per his will."

The eldest son gets $\frac{1}{2}$ of 18 = 9

The second one gets $\frac{1}{3}$ of 18 = 6

The youngest gets $\frac{1}{9}$ of 18 = 2

Now the total number of camels = 17 ($9+6+2=17$)

Then Imam Ali ibn Abi Taleb (as) said, "Now I will take my Camel back."

Imam Ali ibn Abi Taleb's (as) Mathematical Brilliance: Five Loaves of Bread

Zarr Bin Hobeish relates this story: Two travelers sat together on the way to their destination to have a meal. One had five loaves of bread. The other had three. A third traveler was passing by and at the request of the two joined in the meal.

The travelers cut each of the loaf of bread in three equal parts. Each of the travelers ate eight broken pieces of the loaf.

At the time of leaving the third traveler took out eight dirhams and gave to the first two men who had offered him the meal, and went away. On receiving the money the two travelers started quarrelling as to who should have how much of the money.



The five loaf man demanded five dirhams. The three loaf man insisted on dividing the money in two equal parts.

The dispute was brought to Imam Ali ibn Abi Taleb (as) (the Caliph of the time in Arabia) to be decided.

Imam Ali ibn Abi Taleb (as) requested the three loaf man to accept three dirhams, because five-loaf-man has been more than fair to you. The three loaf man refused and said that he would take only four dirhams. At this Imam Ali ibn Abi Taleb (as) replied, "You can have only one dirham." You had eight loaves between yourselves. Each loaf was broken in three parts. Therefore, you had 24 equal parts. Your three loaves made nine parts out of which you have eaten eight portions, leaving just one to the third traveler. Your friend had five loaves which divided into three made fifteen pieces. He ate eight pieces and gave seven pieces to the guest. As such the guest shared one part from your loaves and seven from those of your friend. So you should get one dirham and your friend should receive seven dirhams.