

POSERS

Poser 1 - "Getting mixed up"

Suppose you have two glasses; one contains water and the other contains the same amount of cordial. You take a teaspoonful of cordial and put it in the water and then you take a teaspoonful of this mixture of cordial and water and put it in the cordial. Is there more cordial in the water than water in the cordial, or more water in the cordial than cordial in the water?

Poser 2 - "Making it simple"

Simplify $(x-a)(x-b)(x-c) \dots (x-z)$.

Poser 3 - "Weighing it up"

There were 10 slaves each carrying 10 bags of gold each weighing 10 lbs. One slave took 1 lb of gold from each of his 10 bags and sold it. The caliph detected the thief by using a weighing machine only once. How?

Poser 4 - "A touching matter"

Find the length of the radius of the circle which can be inscribed in the right-angled triangle of sides 5, 12, 13 units.

Poser 5 - "Buying it up"

A man walks into a shop, points to what he wants to buy and says, "How much for 7?" "10 cents" the salesman replies. "And how much for 28?" "20 cents". "And how much for 126?" "30 cents".

How much for 500 - and what was he buying?

Poser 6 - "The half hen"

If a hen and a half lays an egg and a half in a day and a half, how long will it take one hen to lay three eggs?

Answers to the posers on p.40.

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