

Puzzle

As always, we present two puzzles from Sam Lloyd to our beloved readers. Of course we will first give the solutions of the puzzles in the previous Aenorm.

Tell mother's age

Let T be the age of Tommy, F the age of his father and M the age of his mother. We know the following facts:

$$T + F + M = 70 \quad (1)$$

$$6T = F \quad (2)$$

We also know that when their combined ages will be twice of what they present know, Tommy's father will only be twice as old as Tommy. Since this will be the case in $70/3$ years, we know that:

$$2(T + 70/3) = F + 70/3 \quad (3)$$

Combining (3) with (2) we can find that:
 $T = 35/6$ and $F = 35$

Of course we want to know the age of the mother, which follows easily from (1): $M = 175/6$ or 29 years and 2 months.

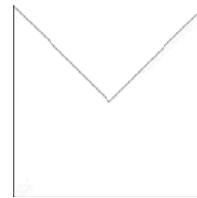
Jealous Couples

Describing the male econometricians as ABCD and the female econometricians as abcd, the 17 trips of the boat can readily be followed:

Shore	Island	Over
ABCDabcd	0	0
ABCDcd	0	ab
ABCDbcd	0	a
ABCDd	bc	a
ABCDcd	b	a
CDcd	b	ABa
BCDcd	b	Aa
BCD	bcd	Aa
BCDd	bc	Aa
Dd	bc	ABCa
Dd	abc	ABC
Dd	b	ABCac
BDd	b	ACac
d	b	ABCDac
d	bc	ABCDa
d	0	ABCDabc
cd	0	ABCDab
0	0	ABCDabcc

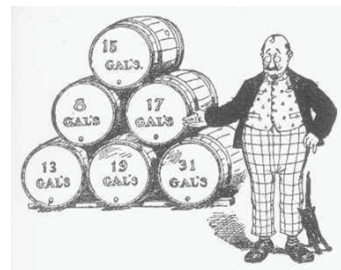
Making a perfect Square

The redaction of Aenorm is very interested in origami, especially when it involves some kind of mathematical understanding. Suppose we would have a paper in the following shape:



All econometricians like perfect squares, so we would like to convert this shape into one. We can use a pair of scissors, but the challenge is to cut the mitre-shaped piece of paper into the fewest possible number of pieces which will fit together and form a perfect square.

Six bottles of beer on the wall



At the University of Amsterdam, a professor decided to make some extra money by selling beer and wine to students. He started his new business with an odd lot of beer and wine. Of course the VSAE was down on it like a flash and bought 140 euro worth of beer and wine, paying twice as much for the wine as for the beer per gallon. With doing so we left the professor with only one barrel. Now, see if you can guess what that barrel was worth?

Solutions

Solutions to the two puzzles above can be submitted up to September 1st. You can hand them in at the VSAE room; C6.06, mail them to info@vsae.nl or send them to VSAE, for the attention of Aenorm puzzle 59, Roetersstraat 11, 1018 WB Amsterdam, Holland. Among the correct submissions, one book token will be won. Solutions can be both in English as in Dutch.