



# Neurological Nasties XLVIII

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1. Walter Winemaker has a barrel. He fills the barrel with something in such a way that the barrel is now lighter than when it was empty. What did he fill it with ?

No, the answer is not helium or air, nor is it white paint, acid or fire. Filling the barrel with laughs is also unacceptable. What could it be ?

2. Fred won a large amount of money in a lottery. He put  $\frac{1}{2}$  of the amount in the bank and gave  $\frac{1}{4}$  of the rest to his daughter. He spent the remaining amount on a world trip. If his trip cost \$90 000, how much did Fred win ?



3. The number three can be partitioned into the sum of two or more positive whole numbers in three ways:  $1 + 2$ ,  $2 + 1$ , or  $1 + 1 + 1$ .

What about the number ten ?

What about the number  $n$  ?

