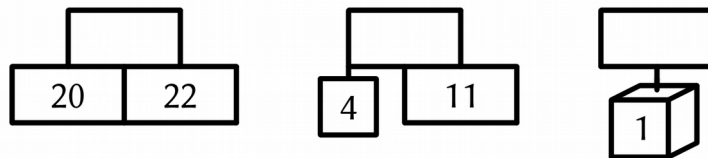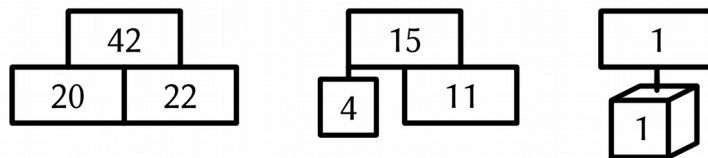# chalkdust

A magazine for the mathematically curious

Christmas conundrum #2

In the Christmas tree below, the rectangle, baubles, and the star at the top each contain a number. The square baubles contain square numbers; the triangle baubles contain triangle numbers; and the cube bauble contains a cube number.

The numbers in the rectangles (and the star) are equal to the sum of the numbers below them. For example, if the following numbers are filled in:

then you can deduce the following:

With the information given in the tree, you can work out the rest of the numbers. Once you've worked out the number in the star at the top, head to **chalkdustmagazine.com** and enter this numbers for a chance to win a signed copy of *The Indisputable Existence of Santa Claus* by Hannah Fry and Thomas Oléron Evans.