

Cal Poly Department of Mathematics

Puzzle of the Week

April 10 - 16, 2014

From Dave Camp:

Fibonacci has a puzzle in *Liber Abbici* which goes as follows: A man whose end was approaching summoned his sons and said: "Divide my money as I shall prescribe." To the eldest son, he said, "You are to have 1 bezant and a seventh of what is left." To the second son, he said, "Take 2 bezants and a seventh of what is left." To the third son, "You are to take 3 bezants and a seventh of what is left." And so he continued with each of his sons: Each received 1 bezant more than the previous son and a seventh of what remained, and the last son was to take all that was left. After following their fathers instructions with care, the sons found that they had shared their inheritance equally. How many sons were there, and how large was the estate?

Solutions should be submitted to Morgan Sherman:

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before next Thursday. Those with correct and complete solutions will have their names listed on the puzzle's web site (see below) as well as in next week's email announcement. Anybody is welcome to make a submission.

<http://www.calpoly.edu/~sherman1/puzzleoftheweek>