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A SOLUTION TO AN "UNSOLVED PROBLEM IN NUMBER THEORY"

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Abstract. We discuss the problem of finding integer-sided triangles with the ratio base/altitude or altitude/base an integer. This problem is mentioned in Richard Guy's book "Unsolved Problems in Number Theory". The problem is shown to be equivalent to finding rational points on a family of elliptic curves. Various computational resources are used to find those integers in $[1, 99]$ which do appear, and also find the sides of example triangles.

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