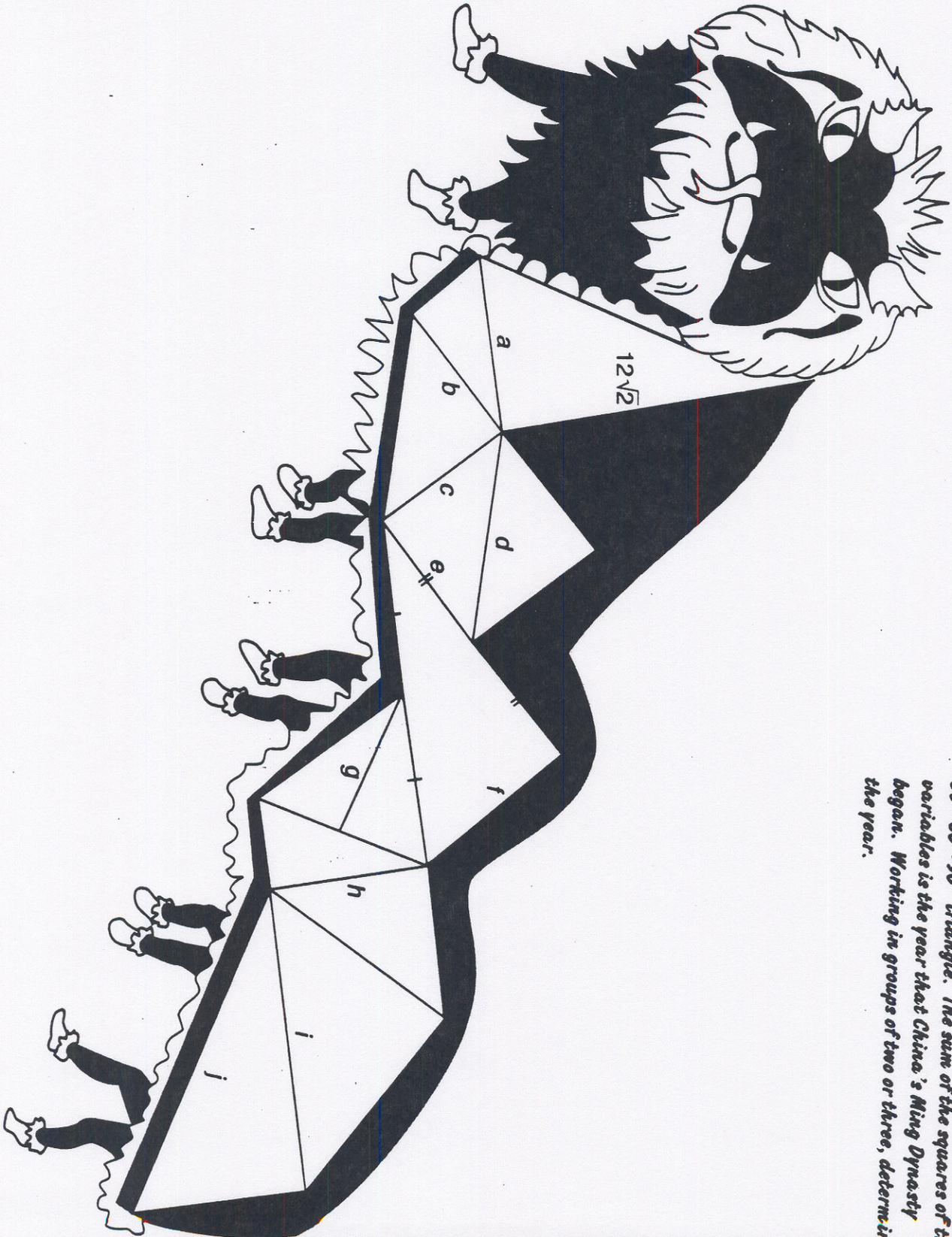


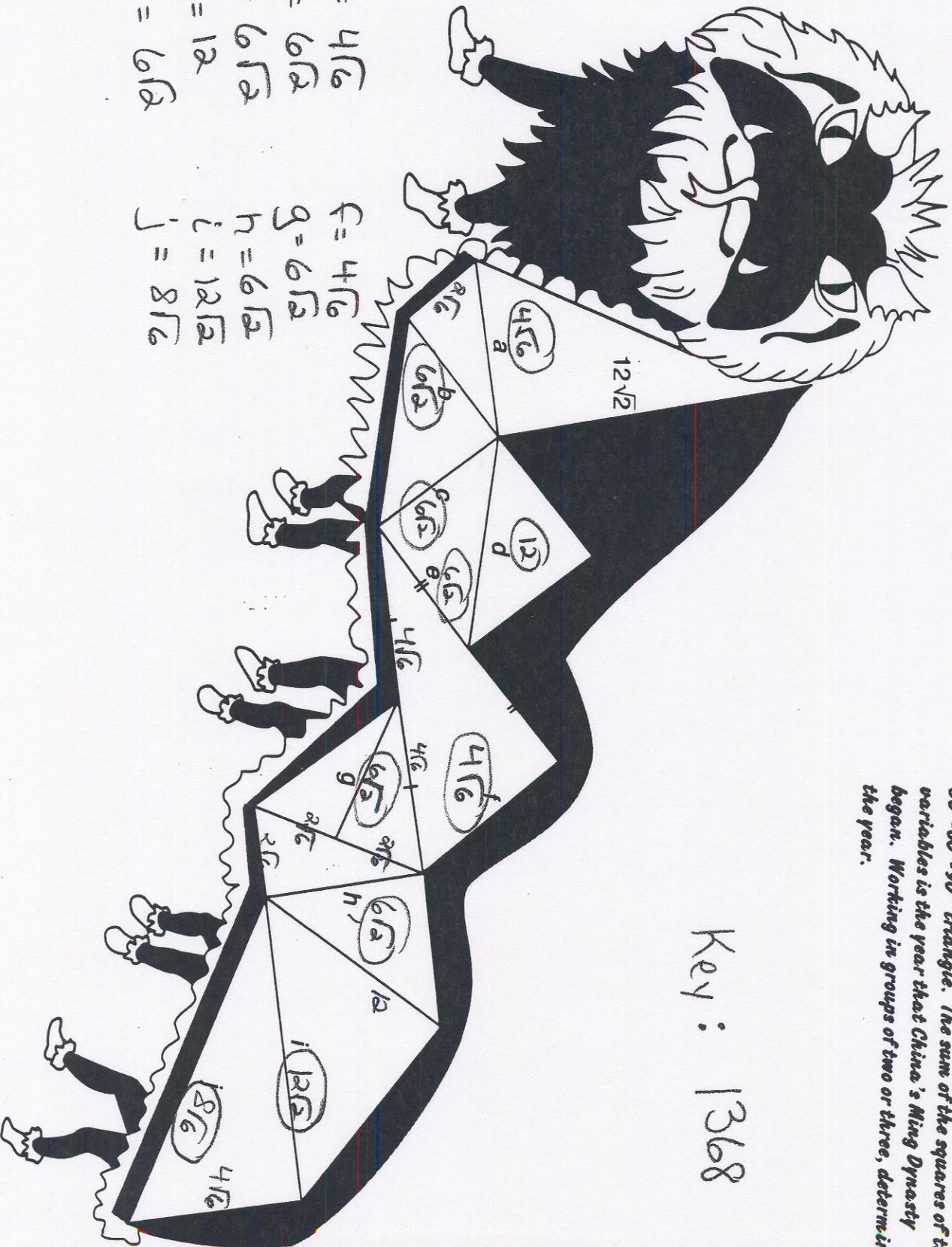
Chinese Dragon Puzzle



Each triangle on the dragon's tail is a 45° - 45° - 90° or 30° - 60° - 90° triangle. The sum of the squares of the variables is the year that China's Ming Dynasty began. Working in groups of two or three, determine the year.

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Key: 1368



$$\begin{aligned}
 a &= 4\sqrt{6} \\
 b &= 6\sqrt{2} \\
 c &= 6\sqrt{2} \\
 d &= 12 \\
 e &= 6\sqrt{2} \\
 f &= 4\sqrt{6} \\
 g &= 6\sqrt{2} \\
 h &= 6\sqrt{2} \\
 i &= 12\sqrt{2} \\
 j &= 8\sqrt{6}
 \end{aligned}$$