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Our focus is on graph labelings for which the rule for edge labels is the product of the vertex labels, with certain conditions to be met. Two examples are strongly multiplicative labelings, in which the vertex labels are $1, 2, \dots, n$, with no two edges receiving the same label, and geometric labelings, in which the vertex labels are arbitrary positive integers, but the edge labels must form a geometric sequence. Various aspects of such labelings will be considered. We also investigate some properties of labelings in which the edge labels are binomial coefficients or other combinatorial quantities. (Received August 24, 2008)