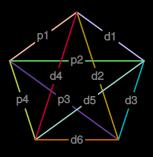# Four events, six durations, a unique identity with 125 solutions

Given 4 events, p1-p4, dated in calendar time, a further 6 durations, d1-d6, may be calculated from the pairwise differences, defining a unique identity between 10 total time measures. The 10-way identity can be represented on a graph, such as the large key given in the lower right corner. The full identity may be derived given at least four of the time measures, as long as the four measures form a connected graph that connects to all five vertices. There are 125 combinations of time measures that meet this requirement.

Key

Tim Riffe, April 2017