Mathematics

A band's tempo can be measured in beats per minute. Suppose a procession steps once on every beat of "When the Saints Go Marching In." Two practice tempos give the walkers different travel times over the same number of steps.

Given In two 15-second intervals, a student counts 20 beats, then 30 beats. There are 60 seconds in a minute. The route takes 120 equal steps. These are sample classroom measurements.

Solve Find each tempo in beats per minute. At each tempo, how many seconds would 120 steps take? Explain why the faster group finishes sooner. Check your result by tapping for 15 seconds with a timer.

Teacher key 80 and 120 beats per minute. At one step per beat, 120 steps take 90 seconds and 60 seconds, respectively.