Matt. 20:1-16 slightly revised

A householder hired a number of men to work in his vineyard. They all worked at the same rate, and if they had all begun and finished at the same time, they could have done the necessary work in 6 hours.

Suppose, however, that the men reported to work singly at equal intervals. Once on the job, they all stayed until the work was finished. It turned out that the one who arrived first worked three times as long as the one who arrived last. How many hours did the first arrival work?

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The interesting thing about this problem is that we do not need any information at all about the number of men involved, goven that there are at least two. The key observation is that the sum of the time spans worked by the first and last worker is equal to the sum worked by the second and penultimate worker, and so on. The average working time for all the men is equal to the average working time for the first and the last. Since we know that the average working time is 6 hours, the first and last men together must have worked 12 hours together. Since one worked three times as long as the other, the first arrival worked nine hours and the last three hours.

One possible scenario is to have seven men arriving hourly in the morning at 6, 7, 8, 9, 10, 11 and 12 o'clock and working until 3 o'clock in the afternoon. The respective working times are 9, 8, 7, 6, 5, 4, 3 hours, for a total amount of 42 hours, or an average of 6 hours each.