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$$\Sigma(x - k) = 520, \quad \Sigma(x - k)^2 = 9640,$$

where  $k$  is a constant.

(a) Given that the mean of these 40 values of  $x$  is 34, find the value of  $k$ .

[2]

[illegible]

**(b)** Find the variance of these 40 values of  $x$ .

[2]

This image shows a full page of white paper with ten horizontal dashed lines, typical of primary school handwriting practice paper. The lines are evenly spaced and extend across the entire width of the page. There is no text or other markings on the paper.