

- (a)** Given that $P(X = 4) = 3P(X = 2)$, find the value of a and the value of k . [4]

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- (b)** Draw up the probability distribution table for X , giving the probabilities as numerical fractions. [1]

[illegible]

- (c) Given that $E(X) = 3.2$, find $\text{Var}(X)$. [2]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.