1 The random variable X takes the value x with probability kx^2, where k is a constant and x takes the values $-2, 1, 2, 3$ only.

(a) Draw up the probability distribution table for X, giving the probabilities as numerical fractions. [3]

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(b) Find $\mathrm{E}(X)$. [1]

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(c) Find $\mathrm{P}(X \neq 2 \,|\, X > 0)$. [2]

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