

- 3** In a probability distribution the random variable X takes the value x with probability kx^2 , where k is a constant and x takes values $-2, -1, 2, 4$ only.

(i) Show that $P(X = -2)$ has the same value as $P(X = 2)$. [1]

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(ii) Draw up the probability distribution table for X , in terms of k , and find the value of k . [3]

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(iii) Find $E(X)$. [2]

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