

- 1** The random variable X takes the values -2 , 2 and 3 . It is given that

$$P(X = x) = k(x^2 - 1),$$

where k is a constant.

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

[3]

[illegible]

- (b)** Find $E(X)$ and $\text{Var}(X)$.

[3]

[illegible]