**6** The probability distribution of the discrete random variable $X$ is shown in the table.

| $x$ | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| $P(X = x)$ | 0.2 | $a$ | $3a$ | 0.4 |

(a) Calculate the value of the constant $a$. [1]

(b) A single value of $X$ is chosen at random.

Find the probability that the value is an odd number. [1]

(c) **Two** independent values of $X$ are chosen at random.

Calculate the probability that the total of the two values is 3. [3]