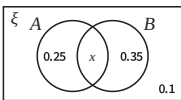
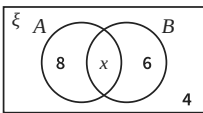
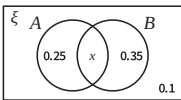
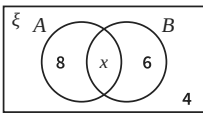


a Three of the numbers 1 to 6 are picked at random. Find $P(\text{all three even})$. $\frac{1}{20}$ three stages without replacement	b Two of the numbers 1 to 5 are picked at random. Find $P(\text{the sum is even})$. $\frac{2}{5}$ two routes to the same result	c Find $P(B \text{ given } A)$  $\frac{6}{11}$ a region to find first	d A and B are mutually exclusive. $P(B) = 0.4$. Find $P(A \text{ given } B)$. 0 mutually exclusive: no overlap
e Two fair dice are rolled. At least one shows a 6. Find $P(\text{both 6})$. $\frac{1}{11}$ a condition of at least one	f Two of the numbers 1 to 5 are picked at random. The 2nd is even. Find $P(\text{1st even})$. $\frac{1}{4}$ a later result as the condition	g $P(A) = 0.3$, $P(B \text{ given } A) = 0.5$ and $P(A \text{ given } B) = 0.4$. Find $P(B)$. 0.375 two rules chained	h A and B are independent. $P(A) = 0.3$ and $P(A \cup B) = 0.58$. Find $P(B)$. 0.4 independent, from a union
i Find x when $P(A \text{ given } B) = 0.4$.  $x = 4$ a count from a conditional probability	j $P(A) = p$, $P(B \text{ given } A) = 0.5$, $P(B \text{ given } A') = 0.2$ and $P(B) = 0.32$. Find p . $p = 0.4$ working back through two routes	k x of 10 counters are red. Two are taken at random together. Find $P(\text{both red})$ in terms of x . $\frac{x(x-1)}{90}$ an expression without replacement	l 3 of n counters are red. Two are taken at random together. $P(\text{both red}) = \frac{1}{15}$. Find n . $n = 10$ solving for the number of counters

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