

a A random whole number from 1 to 12 is odd. Find $P(\text{prime})$. $\frac{4}{6} = \frac{2}{3}$ a condition shrinks the list	b Find $P(A \text{ given } D)$ <table><tr><td></td><td>C</td><td>D</td></tr><tr><td>A</td><td>0.15</td><td>0.15</td></tr><tr><td>B</td><td>0.25</td><td>0.45</td></tr></table> 0.25 a table of probabilities		C	D	A	0.15	0.15	B	0.25	0.45	c Find $P(B \text{ given } A)$ 0.4 a Venn diagram of probabilities	d Two of the numbers 1 to 6 are picked at random. The 1st is even. Find $P(\text{2nd even})$. $\frac{2}{5}$ without replacement: one fewer							
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e Two of the numbers 1 to 6 are picked at random. Find $P(\text{both even})$. $\frac{1}{5}$ both, without replacement	f Two of the numbers 1 to 6 are picked at random. Find $P(\text{one even, one odd})$. $\frac{3}{5}$ one of each: two orders	g Two of the numbers 1 to 6 are picked at random. Find $P(\text{at least one even})$. $\frac{4}{5}$ at least one: one minus none	h Find $P(D \text{ given } B)$ <table><tr><td></td><td>C</td><td>D</td><td>Total</td></tr><tr><td>A</td><td>7</td><td></td><td>20</td></tr><tr><td>B</td><td></td><td></td><td></td></tr><tr><td>Total</td><td>15</td><td></td><td>50</td></tr></table> $22/30 = 11/15$ complete the table first		C	D	Total	A	7		20	B				Total	15		50
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i A and B are independent. $P(A) = 0.4$ and $P(B) = 0.5$. Find $P(A \text{ given } B)$. 0.4 independent: nothing changes	j Events A and B have $P(A \text{ and } B) = 0.12$ and $P(B \text{ given } A) = 0.4$. Find $P(A)$. 0.3 the rule, finding $P(A)$	k $P(A) = 0.6$, $P(B \text{ given } A) = 0.5$ and $P(B \text{ given } A') = 0.3$. Find $P(B)$. 0.42 two routes to B	l $P(A) = 0.5$, $P(B) = 0.4$ and $P(A \cup B) = 0.8$. Find $P(A \text{ given } B)$. 0.25 the overlap from a union, then given																

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