

a Find $P(C \text{ given } A)$ <table border="1"> <thead> <tr> <th></th> <th>C</th> <th>D</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th>A</th> <td>12</td> <td>18</td> <td>30</td> </tr> <tr> <th>B</th> <td>8</td> <td>22</td> <td>30</td> </tr> <tr> <th>Total</th> <td>20</td> <td>40</td> <td>60</td> </tr> </tbody> </table> $12/30 = 2/5$ given A: out of A		C	D	Total	A	12	18	30	B	8	22	30	Total	20	40	60	b Find $P(A \text{ given } C)$ <table border="1"> <thead> <tr> <th></th> <th>C</th> <th>D</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th>A</th> <td>12</td> <td>18</td> <td>30</td> </tr> <tr> <th>B</th> <td>8</td> <td>22</td> <td>30</td> </tr> <tr> <th>Total</th> <td>20</td> <td>40</td> <td>60</td> </tr> </tbody> </table> $12/20 = 3/5$ the other way round		C	D	Total	A	12	18	30	B	8	22	30	Total	20	40	60	c Find $P(A \text{ given } B)$ $6/16 = 3/8$ given from a Venn diagram	d Find $P(B \text{ given } A')$ $10/15 = 2/3$ given not A
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