Quiz 3

Consider the experiment of tossing two fair dice. Consider the following events:

- A = sum is even

- B = a match (both numbers are the same)

- C = sum is larger than five

- D = sum is odd.

You can use this table to help yourself with the computations:

$$
\begin{array}{cccccc}
(1,1) & (1,2) & (1,3) & (1,4) & (1,5) & (1,6) \\
(2,1) & (2,2) & (2,3) & (2,4) & (2,5) & (2,6) \\
(3,1) & (3,2) & (3,3) & (3,4) & (3,5) & (3,6) \\
(4,1) & (4,2) & (4,3) & (4,4) & (4,5) & (4,6) \\
(5,1) & (5,2) & (5,3) & (5,4) & (5,5) & (5,6) \\
(6,1) & (6,2) & (6,3) & (6,4) & (6,5) & (6,6)
\end{array}
$$

1. Find the following:

- $P(A) = $ _____

- $P(B) = $ _____

- $P(C) = $ _____

- $P(D) = $ _____

- $P(A|B) = $ _____

- $P(D|B) = $ _____

- $P(A|C) = $ _____

- $P(C|A) = $ _____

- $P(B|C) = $ _____

2. Which pair of events are independent?

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