Group $\qquad$ Names

## Group Quiz for Section 2.5

1. Suppose that you roll two fair dice. Let $A$ be the event that the first roll is a 1 or 2 , and let $B$ be the event that a 3 appears at least once. Let $D$ be the event that the sum is 5 . Show that $A$ and $B$ are not independent, but that they are conditionally independent given $D$.
