Consider these four events:

- A. You get an A in STAT 100.
- B. You get a B in STAT 100.
- C. You pass all of your classes.
- D. You fail all of your classes.

Which of the following is NOT true, and why not? (Your answer should contain the words “mutually exclusive”.)

1. $P(A \text{ or } B) = P(A) + P(B)$
2. $P(A \text{ or } C) = P(A) + P(C)$
3. $P(A \text{ or } D) = P(A) + P(D)$