## In-Video Quiz Questions for Unit 2: Part 1 – (1) Disjoint events & general addition rule

## (05:11)

1. What is the probability that a randomly sampled student thinks marijuana should be legalized or they agree with their parents' political views?

	Share Parents' Politics		
Legalize MJ	No	Yes	Total
No	11	40	51
Yes	36	78	114
Total	47	118	165

- (a) (40+36-78) / 165
- (b) (114+118-78) / 165
- (c) 78 / 165
- (d) 78 / 188
- (e) 11 / 47

## (09:28)

- 2. In a survey, 52% of respondents said they are from Asia. Which of the following is **not** a plausible answer for what percent of the respondents in this survey are from Europe?
  - (a) 0.48
  - (b) more than 0.48
  - (c) less than 0.48

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## **Answers:**

1. b

Explanation: Use the general addition rule.

2. b

*Explanation:* If the respondents are only from Asia and Europe, the answer would be 0.48. If there are other continents represented, the answer would be less than 0.48. The answer can't ever be more than 0.48 since then the sum of the probabilities of all possible outcomes would be more than 1 (0.52 + a value more than 0.48 > 1).