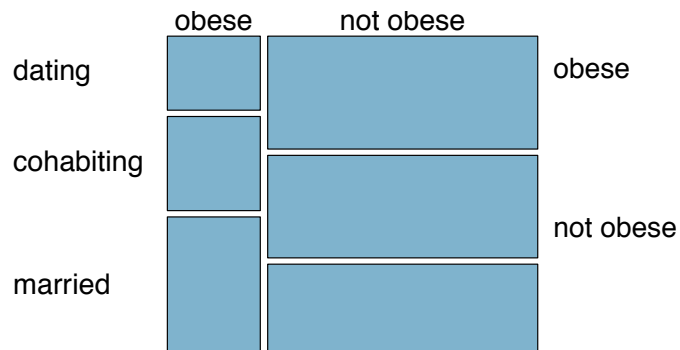**In-Video Quiz Questions for**
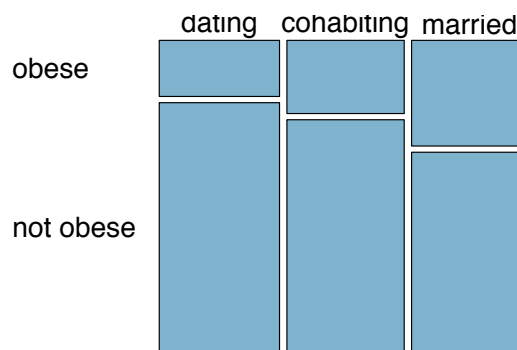**Unit 5: Part 4 – (2) The Chi-Square Independence Test**

(03:38) – slide 4, after "And in this case that means weight and relationship status are dependent, and obesity rates do vary by relationship status."

1. If relationship status is the explanatory and weight status is the response variable, which of the following is the correct representation of the relationship?

I.

II.

(a) I
(b) II

(07:47) – slide 7, after "Some of which we've calculated together, some of which we haven't."

1. 2. If in fact weight and relationship status are independent, how many of the dating people would we expect to be not obese?

	dating	cohabiting	married	total
obese	81	103	147	331
not obese	359	326	277	962

	total	440	429	424	1293

(a) 113
(b) 315
(c) 319
(d) 327
(e) 359

Answers:

1. b

Explanation: Explanatory variable on the x-axis, response variable on the y-axis.

2. d

Explanation: E = (row total) * (column total) / (table total) = 962 * 440 /1293 ≈ 327