

**In-Video Quiz Questions for  
 Unit 2: Part 2 – (1) Conditional Probability**

**Answer questions 1-3 using the following table:**

results:		objective social class position		Total
		working class	upper middle class	
subjective social class identity	poor	0	0	0
	working class	8	0	8
	middle class	32	13	45
	upper middle class	8	37	45
	upper class	0	0	0
	Total	48	50	98

**(02:20)**

- What is the probability that a student's subjective social class identity is upper middle class?
 

(a)  $8 / 48 \approx 0.17$

(b)  $45 / 98 \approx 0.46$

(c)  $8 / 45 \approx 0.18$

(d)  $37 / 50 \approx 0.74$

(e)  $37 / 45 \approx 0.82$

**(03:35)**

- What is the probability that a student's objective and subjective class is working class?
 

(a)  $48 / 98 \approx 0.49$

(b)  $8 / 48 \approx 0.17$

(c)  $8 / 98 \approx 0.08$

(d)  $8 / 8 \approx 1$

**(04:30)**

- If a student's objective class position is upper middle class, what is the probability that they associate with middle class?
 

(a)  $32 / 48 \approx 0.67$

(b)  $13 / 45 \approx 0.29$

(c)  $13 / 98 \approx 0.13$

(d)  $13 / 50 \approx 0.26$

(e)  $32 / 45 \approx 0.71$

(08:59)

4. Same data: "The American Community Survey is an ongoing survey that provides data every year to give communities the current information they need to plan investments and services. The 2010 American Community Survey estimates that 14.6% of Americans live below the poverty line, 20.7% speak a language other than English at home, and 4.2% fall into both categories." Based on this information, what percent of Americans who live below the poverty line **also** speak a language other than English at home?
- (a)  $0.207 / 0.146 \approx 1.42$
  - (b)  $0.042 / 0.207 \approx 0.2$
  - (c)  $(0.146 * 0.207) / 0.146 \approx 0.207$
  - (d)  $0.146 / 0.207 \approx 0.71$
  - (e)  $0.042 / 0.146 \approx 0.29$

**Answers:**

1. b

*Explanation:* 45 out of 98 students have upper middle class subjective social class identity.

2. c

*Explanation:* 8 out of 98 students have working class for both subjective and objective class identity / position.

3. d

*Explanation:*  $P(\text{associate middle class} \mid \text{objective upper middle class}) = 13 / 50$

4. e

*Explanation:*  $P(\text{speak a language other than English} \mid \text{live below the poverty line}) = 0.042 / 0.146 \approx 0.29$