

In-Video Quiz Questions for
Unit 7: Part 1 – (1) Multiple Predictors

(03:19) – slide 4, after “Perhaps the paper type, and maybe something like that makes up the remainder about seven percent of the unexplained variability.”

1. Which of the following is the slope estimate associated with the volume variable?

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	197.96	59.19	3.34	0.01
volume	0.72	0.06	11.67	0.00
cover:pb	-184.05	40.49	-4.55	0.00

- (a) -184.05
- (b) 0.06
- (c) 0.72
- (d) 11.67
- (e) 197.96

(11:02) – slide 10, after “I wanted to make a point about that just so you realize that the simplifying assumption might not always make sense and there are remedies for when it does not”

2. Which of the following is the correct calculation for the predicted weight of a hardcover book that is 450 cm³?

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	197.96	59.19	3.34	0.01
volume	0.72	0.06	11.67	0.00
cover:pb	-184.05	40.49	-4.55	0.00

- (a) $184.05 + 0.72 \times 450 - 197.96 \times 0$
- (b) $197.96 + 0.72 \times 450 - 184.05 \times 1$
- (c) $197.96 + 0.72 \times 0 - 184.05 \times 450$
- (d) $197.96 + 0.72 \times 450 - 184.05 \times 0$

Answers:

1. c

Explanation: Look in the volume row and Estimate column in the regression output.

2. d

Explanation: Plug in 450 for volume, and 0 for cover type since hardcover is the reference level.