

$$\text{Also, } F_{\text{test}} = \frac{(R_{ur}^2 - R_r^2)/q}{(1 - R_{ur}^2)/(n-k-1)}$$

Reject H_0 .

NBASAL:

$$\text{wage} = \beta_0 + \beta_1 \text{points} + \beta_2 \text{reb.} + \beta_3 \text{assists} + u$$

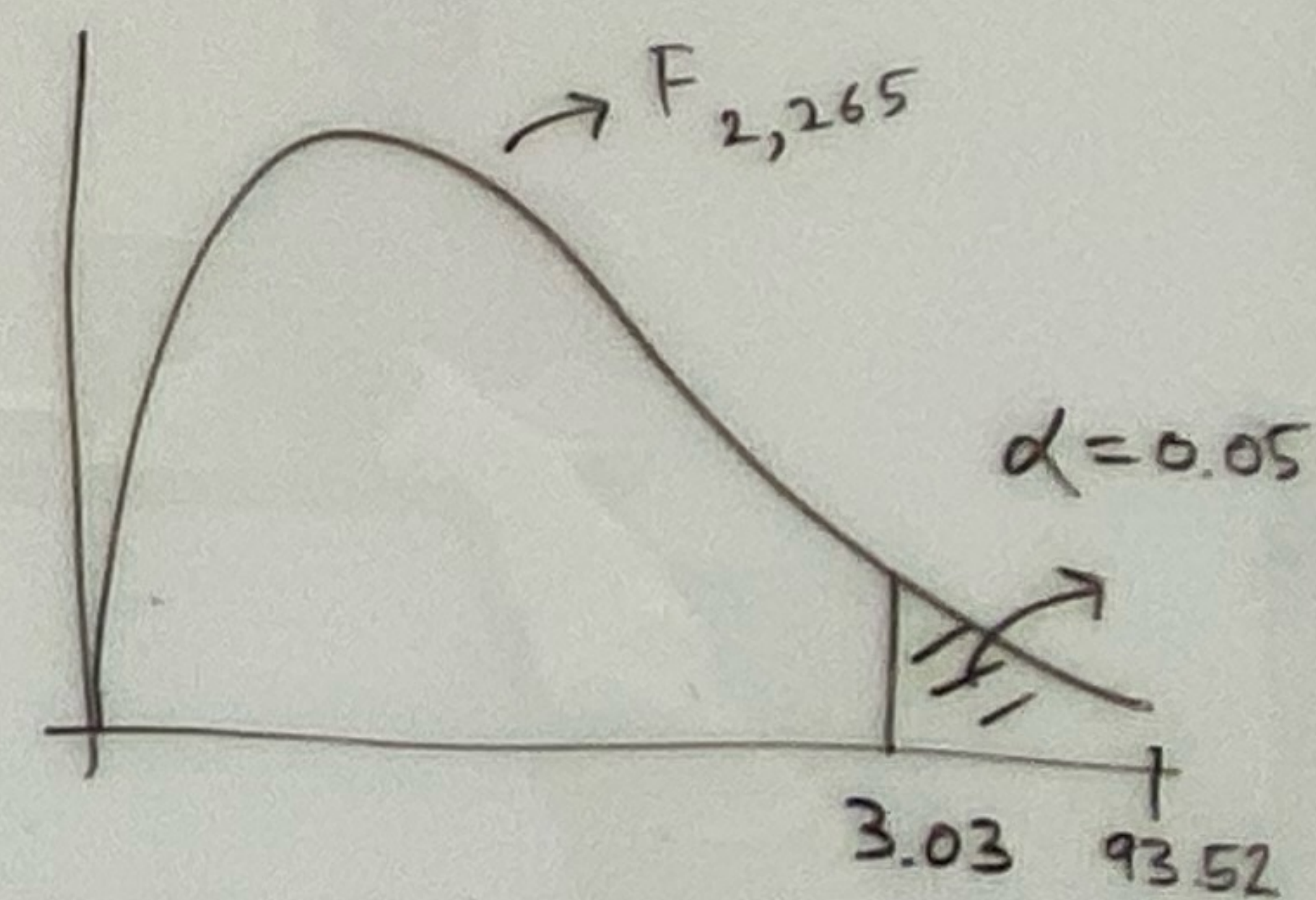
$$H_0: \beta_1 = 0, \beta_2 = 0$$

H_1 : not H_0 .

$$F_{\text{test}} = 93.52$$

$$c \text{ for } F_{2,265} = 3.03 \text{ (using Stata or Table G.3b)}$$

$$\alpha = 0.05$$



Special case: overall significance of regression

$$H_0: \beta_1 = 0, \dots, \beta_k = 0$$

H_1 : at least one of $\beta_1 \dots \beta_k \neq 0$

$$R^2_{ur} = 0 \quad R^2_{ur} = \text{usual } R^2 \quad q = k$$

NBASAL:

$$\text{wage} = \beta_0 + \beta_1 \text{ points} + \beta_2 \text{ reb.} + \beta_3 \text{ assists} + u$$

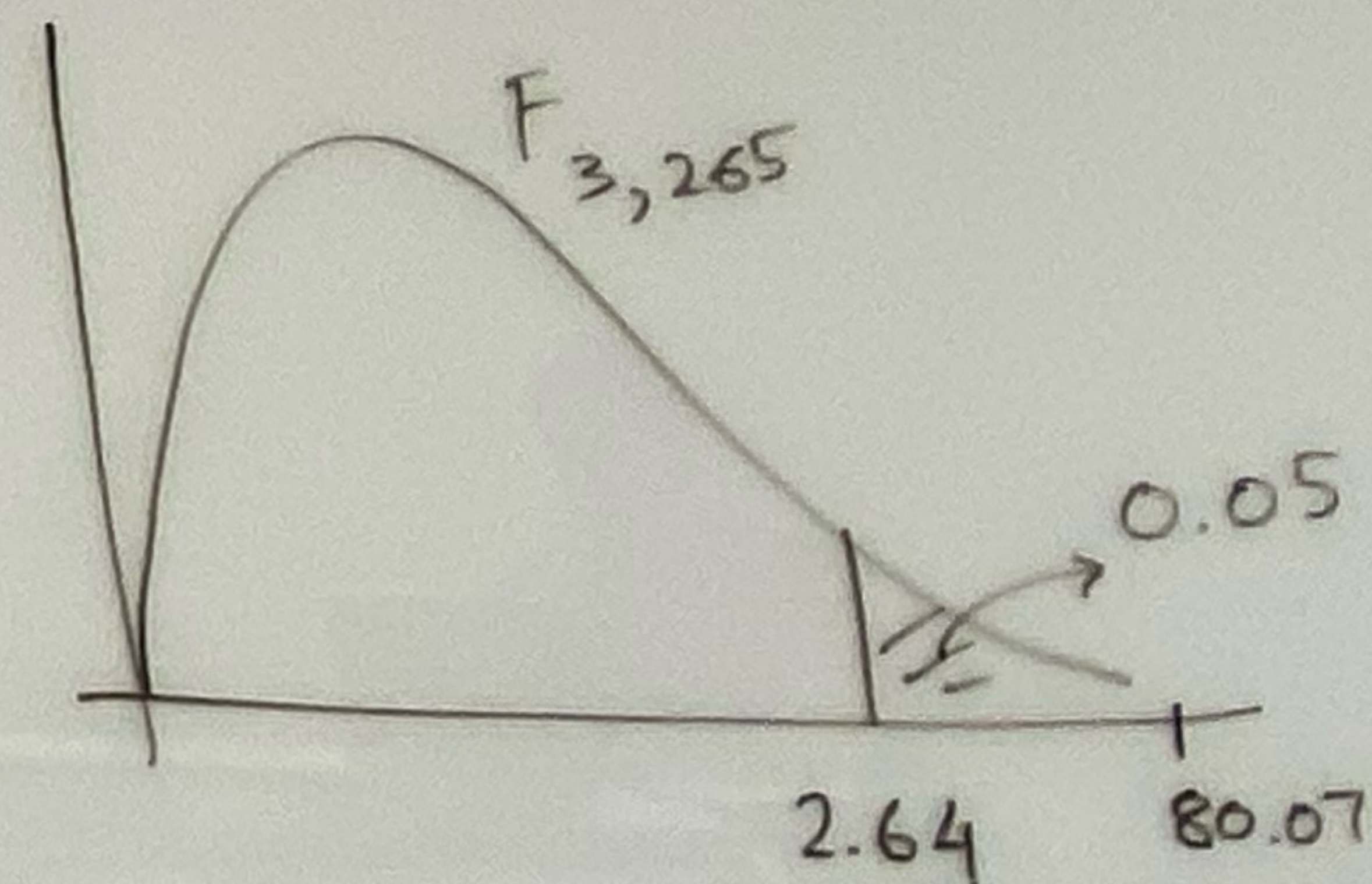
$$F_{\text{test}} = \frac{R^2 / k}{(1 - R^2) / (n - k - 1)}$$

$$H_0: \beta_1 = 0, \beta_2 = 0, \beta_3 = 0$$

H_1 : not H_0

$$F_{\text{test}} = 80.07$$

$$< \text{ for } F_{3, 265} = 2.64 \\ (\alpha = 0.05)$$



Reject H_0 .

