

Exercise

Euro distributor. sav

Y = Travel time (hours)

X_1 = Distance (km)

X_2 = No of deliveries

a) $Y \approx \beta_0 + \beta_1 \cdot x_1$

$\beta_1 = 0.06783$ estimate of the change in y for a one-unit change in x_1 (four minutes)

b) $Y \approx \beta_0 + \beta_1 \cdot x_1 + \beta_2 \cdot x_2$

$\beta_1 = 0.0611$ estimate of the expected increase of travel time corresponding to an increase of one kilometre in the distance travelled when the number of deliveries is held constant

Exercise Euro distributor.sav (continued)

$$\beta_2 = 0.923 = 55 \text{ minutes}$$

estimate of the expected increase
in travel time corresponding to
an increase of one delivery
when the distance travelled
is held constant