

EE325 Section 2 Quiz#6

Name: Answers Student ID _____

Sales of dishwashers over the sample period

$$Y_t = \alpha_1 D_1 + \alpha_2 D_2 + \alpha_3 D_3 + \alpha_4 D_4 + u_i \quad (1)$$

Where $Y_t = \text{Sales of dishwashers (in thousands)}$

$D = 1$ the relevant quarter, 0 otherwise

Estimate the model (1) reports in the Table 1

Table 1

Source	SS	df	MS	Number of obs	=	32
Model	19160420.8	4	4790105.19	F(4, 28)	=	204.39
Residual	656219.25	28	23436.4018	Prob > F	=	0.0000
				R-squared	=	0.9669
				Adj R-squared	=	0.9622
Total	19816640	32	619270	Root MSE	=	153.09

dish	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
d1	748.25	54.12532	13.82	0.000	637.3793	859.1207
d2	756.5	54.12532	13.98	0.000	645.6293	867.3707
d3	791.125	54.12532	14.62	0.000	680.2543	901.9957
d4	798.125	54.12532	14.75	0.000	687.2543	908.9957

The average sales of dishwashers in the first quarter in thousands of units, is about 748.25

The average sales of dishwashers in the second quarter in thousands of units, is about 756.5

The average sales of dishwashers in the third quarter in thousands of units, is about 791.125

The average sales of dishwashers in the fourth quarter in thousands of units, is about 798.125

$$Y_t = \beta_1 + \beta_2 D_2 + \beta_3 D_3 + \beta_4 D_4 + u_i \quad (2)$$

Where $Y_t = \text{Sales of dishwashers (in thousands)}$

$D = 1$ the relevant quarter, 0 otherwise

Estimate the model (2) reports in the Table 2

Table 2

Source	SS	df	MS	Number of obs	=	32
Model	14748.75	3	4916.25	F(3, 28)	=	0.21
Residual	656219.25	28	23436.4018	Prob > F	=	0.8888
				R-squared	=	0.0220
				Adj R-squared	=	-0.0828
Total	670968	31	21644.129	Root MSE	=	153.09

dish	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
d2	8.25	76.54476	0.11	0.915	-148.5448	165.0448
d3	42.875	76.54476	0.56	0.580	-113.9198	199.6698
d4	49.875	76.54476	0.65	0.520	-106.9198	206.6698
_cons	748.25	54.12532	13.82	0.000	637.3793	859.1207

The average sales of dishwashers in the first quarter in thousands of units, is about 748.25

The average sales of dishwashers in the second quarter in thousands of units, is about 748.25 + 8.25

The average sales of dishwashers in the third quarter in thousands of units, is about 748.25 + 42.875

The average sales of dishwashers in the fourth quarter in thousands of units, is about 748.25 + 49.875