

Q4: Ex 12, Pg 571

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-CA

$$\bar{X}_1 = 462.4$$

$$\bar{X}_2 = 512.8$$

$$\bar{X}_3 = 427.5$$

$$\bar{X}_4 = 469.3$$

$$\bar{X}_5 = 532.1$$

$$W = Q_{\alpha, I, I(J-1)} \cdot \sqrt{MSE/J}$$

$$= Q_{0.5, 5, 5(4-1)} \cdot \sqrt{272.8/4}$$

$$= 4.3699 \sqrt{272.8/4} = 36.064$$

$\bar{X}_3$	$\bar{X}_1$	$\bar{X}_4$	$\bar{X}_2$	$\bar{X}_5$
427.5	462.4	469.3	512.8	532.1

$$\Delta_{\bar{X}_3, \bar{X}_1} = 34.5 < w$$

$$\Delta_{\bar{X}_3, \bar{X}_4} = 41.8 > w$$

$$\Delta_{\bar{X}_1, \bar{X}_4} = 7.3 < w$$

$$\Delta_{\bar{X}_1, \bar{X}_5} = 59.8 > w$$

$$\Delta_{\bar{X}_4, \bar{X}_5} = 43.5 > w$$

$$\Delta_{\bar{X}_2, \bar{X}_5} = 19.3 < w$$

$\bar{X}_3$  and  $\bar{X}_1$  do not differ significantly.

$\bar{X}_4$  and  $\bar{X}_1$  do not differ significantly.

$\bar{X}_2$  and  $\bar{X}_5$  do not differ significantly.

All other sample means differ significantly.