Harvest Walukow

No
Date

9.36 Diketahui: $\bar{x}_A = 720$ $\bar{x}_B = 860$

$s_A = 30$ $s_B = 42$

$CI = 90\% \rightarrow \frac{\alpha}{2} = \frac{0,1}{2} = 0,05$

$n = 62$

$$V = \frac{\left(\frac{30^2}{62} + \frac{42^2}{62}\right)^2}{\left[\frac{\left(\frac{30^2}{62}\right)^2}{61}\right] + \left[\frac{\left(\frac{42^2}{62}\right)^2}{61}\right]} = 110,38 \approx 110$$

$t_{0,05;\,110} = 1.66$

$$(860-720) - 1.66\sqrt{\frac{42^2}{62} + \frac{30^2}{62}} < M_B - M_A < (860-720) + 1.66\sqrt{\frac{42^2}{62} + \frac{30^2}{62}}$$

$$= 129,11 < M_B - M_A < 150,88$$

9.50 Diketahui: $n_1 = 12$ $\bar{x}_1 = 24$ $s_1 = 4,2$ $CI = 99\%$

$n_2 = 16$ $\bar{x}_2 = 18$ $s_2 = 3,6$ $\frac{\alpha}{2} = 0,005$

$$s_p^2 = \frac{(12-1)4,2^2 + (16-1)3,6^2}{12+16-2} = 14,94 \Leftrightarrow s_p = 3,9$$

$v = 26 \rightarrow t_{0,005;\,26} = 2.779$

$$(24-18) - 2,779(3,9)\sqrt{\frac{1}{12} + \frac{1}{16}} < M_1 - M_2 < (24-18) + 2,779(3,9)\sqrt{\frac{1}{12} + \frac{1}{16}}$$

$$1,861 < M_1 - M_2 < 10,138$$