Non-Parametric Tests – 2022 GCE Statistics Further Math A Y542

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The critical region for an $r\%$ two-tailed Wilcoxon signed-rank test, based on a large sample of size n, is $\{W_+ \leqslant 113\} \cup \{W_+ \geqslant 415\}$.

(a) Show that $n = 32$. [3]

(b) Using a suitable approximation, determine the value of r. [4]