

## Question

Let random variable  $W$  have mean  $\mu_w = 58$  and standard deviation  $\sigma_w = 8$ . Let random variable  $X$  represent the **sum** of  $n = 169$  instances of  $W$ .

## Answerlist

- Determine the expected value of  $X$ .  $\mu_x = ?$
- Determine the standard deviation of  $X$ .  $\sigma_x = ?$
- Using normal approximation, determine  $P(X < 9767.68)$ .
- Using normal approximation, determine  $P(X > 9861.28)$ .

## Solution

## Answerlist

- 9802
- 104
- 0.3707
- 0.6293

## Meta-information

extype: string exsolution: yo exname: UZ extol: 0.01