

STA304A1

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Question 1

Question 1 (a)

$$\mu = \frac{1}{N} \sum_{i=1}^N y(e_i) = \frac{1}{4} * (3 + 1 + 0 + 5) = 2.25$$

$$\sigma_y^2 = \frac{1}{4} * ((4 - 2.25)^2 + (3 - 2.25)^2 + (0 - 2.25)^2 + (5 - 2.25)^2) = \frac{65}{16}$$

Question 1 (b)

Question (i) The number of possible SRSs of size $n=2$ is $\binom{4}{2} =$