Problem 2:

$$\begin{aligned} n &= \left(\frac{z_{\alpha/2}\sigma}{e}\right)^2 \\ &= \left(\frac{(2.055)(40)}{10}\right)^2 \\ &= 67.5684 \end{aligned}$$

Then to be able to not exceed the error, we will need to round up so that the sample then has to be of size **68**.