(1) H_0: $\varepsilon = 1$; H_1: $\varepsilon < 1$

(2) Can simply eye-ball these (can calculate the s.e. of the sample mean):

a. fail to reject null
b. reject null in favour of research hypothesis
c. reject null in favour of research hypothesis
d. fail to reject null

(3) The point estimate of μ is the sample mean. You can figure out the point estimate of the population mean is -1.4 from:

$$\text{test-statistic} = \frac{\overline{X} - \mu_0}{\sigma / \sqrt{n}} = -2$$

$$\overline{X} = -2 * \sigma / \sqrt{n} + \mu_0 = -2 * 2/10 + (-1) = -1.4$$

It is DEFINITELY NOT -1.