

Nama : Johannes Yocan W.

NIM : 215314105

① Dikari :

$\mu_0 = 65$, $\sigma = 5.7$, $n = 40$, $\bar{x} = ?$, $\alpha = 1\%$

Tujuan : A

Apakah kecepatan selam ~~dibawah~~ ^{atas} 65 mi/H

Perencanaan :

- mean (\bar{x}) = 68,375

$$\bar{x} = \frac{x_1 + \dots + x_n}{n} = \frac{2735}{40} = 68,375$$

- Hipotesis = Green (7) \rightarrow lebih dari

$$H_0 = \mu \geq 65$$

$$H_1 = \mu < 65$$

- nilai kritis

\rightarrow Right tailed tidak dibagi 2.

~~$z_{\alpha/2} = 0.005 = 2.575$~~ $\rightarrow z_{\alpha} = 0.01 = 2.325$

$z_{hit} =$ ~~2.575~~ 2.325

$$z_{hit} = \frac{\bar{x} - \mu}{\sigma / \sqrt{n}}$$

$$= \frac{68,375 - 65}{5.7 / \sqrt{40}}$$

$$= 3.744$$

$$z_{hit} = 3.744 \geq$$
 ~~2.575~~ 2.325

Jadi, bisa kita bukti bahwa

selam ~~dibawah~~ ^{atas} 65 mi/H

