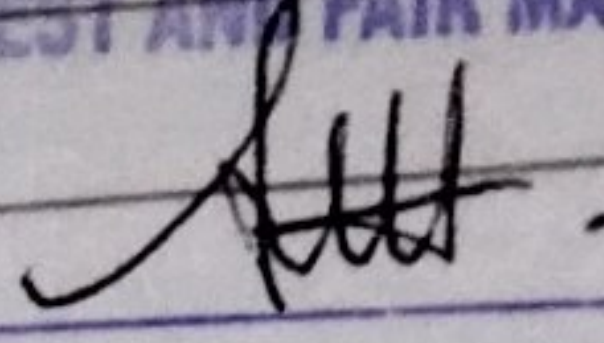


43,8

NIM	: 11421001
NAME	: Edward Tia Pansaitan
SUBJECT	: PROBSTAT
ACKNOWLEDGMENT & SIGNATURE	: I AGREE TO SIT THIS EXAM IN AN HONEST AND FAIR MANNER
	

Bagian A

1. Benar
2. Benar
3. Salah
4. Benar
5. salah

20  
1 + 6

9

$$\frac{3}{5} \times 12,5 = 7,5$$

Bagian B.

1. a. uji hipotesis statistik.

b. Dik:  $\alpha = 5\% = 0,05$

$$n = 10$$

$$\bar{x} = \frac{53,6}{10} = 5,36$$

$$t_{kritik} = 1,645$$

$$H_0 = \mu = 5,36$$

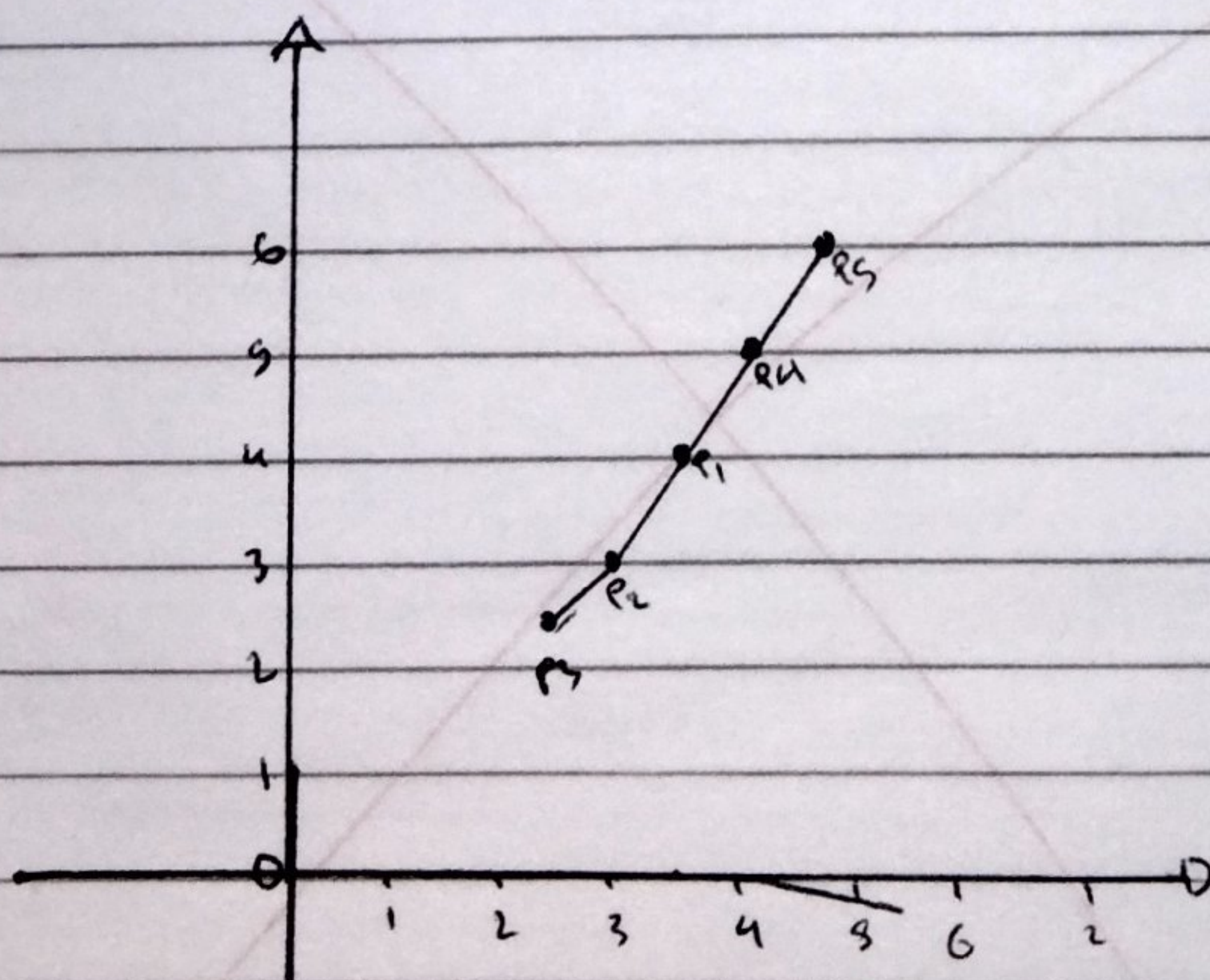
$$H_1 = \mu \neq 5,36$$

$$z = \frac{\bar{x} - \mu_0}{\sigma / \sqrt{n}}$$

$$z > z_{0,05}$$

$H_0$  ditolak.

3. a.



4,8

c. Sangat kuat

b.



2. a.  ~~$s_1^2 = 0.9$~~   $U_1 = 15$   
 ~~$s_2^2 = 0.6$~~   $U_2 = 24$

~~$f \in F_{1,24}(15,24)$~~

~~Q. 12~~  $s_1^2 = 0.9$   $\alpha = 5\% = 0.05$   
 ~~$s_2^2 = 0.6$~~

$$x_1^2 = \frac{(n_1-1)s_1^2}{\sigma^2} = x_2^2 = \frac{(n_2-1)s_2^2}{\sigma^2}$$

$$3.1 = \frac{(25-1) \cdot 0.9^2}{\sigma^2} \times \frac{\sigma}{2} = 0.64 = \frac{(16-1) \cdot 0.6^2}{\sigma^2} \times \frac{\sigma}{2}$$

$$0.81 = \frac{24 \cdot 0.9^2}{(0.81)^2} = 3.2 = \frac{(15) \cdot 0.6^2}{(0.64)^2}$$

$$3.1 = \frac{24 \cdot 0.9^2}{(0.81)^2} \times \frac{0.05}{2}$$



2. b.

$$x_1^2 = 3.1$$

$$= n_1 = 25$$

$$n_2 = 16$$

$$s_1^2 = 0.9$$

$$s_2^2 = 0.6$$

$$x_2^2 = 3.2$$

$$v_1 = 15$$

$$v_2 = 24$$

$$x_1^2 = \frac{(n_1 - 1) s_1^2}{\sigma^2}$$

$$= \frac{(25 - 1) s_1^2}{\sigma^2}$$

$$= \frac{24 \cdot s_1^2}{\sigma^2}$$

$$= \frac{24 \cdot 0.9}{\sigma^2}$$

$$x_1^2 = \frac{21.6}{\sigma^2} \times \frac{\sigma^2}{2}$$

$$x_1^2 = \frac{21.6}{\sigma^2} \times \frac{0.05}{2} = \frac{10.8}{2\sigma^2}$$

$$x_2^2 = \frac{(n_2 - 1) s_2^2}{\sigma^2}$$

$$= \frac{(16 - 1) s_2^2}{\sigma^2}$$

$$= \frac{15 \cdot 0.6}{\sigma^2}$$

$$= \frac{9 \times 0.005}{2\sigma^2}$$

$$= \frac{0.45}{2\sigma^2}$$

berbeda.

a. ~~mis~~

$$f < f - \frac{1}{2}\alpha (15, 24) \quad f > f + \frac{1}{2}\alpha (15, 24)$$

$$H_1 = \sigma_1^2 \neq \sigma_2^2$$