

Handaru Dwiki Yuntara  
D3 IT A / 3122500017.

No. \_\_\_\_\_  
Date: \_\_\_\_\_

Tahun	Periode (x)	Belanggan (y)
2007	0	3.8
2008	1	4.0
2009	2	4.2
2010	3	5.0
2011	4	5.6
2012	5	6.1
2013	6	6.7
2014	7	7.2

} k<sub>1</sub>

} k<sub>2</sub>

Rata-rata kelompok 1 ( $\bar{y}_1$ )

$$\frac{3.8 + 4.0 + 4.2 + 5.0}{4} = 4.25$$

Titik Absis kelompok 1 ( $\bar{x}_1$ )

$$\frac{0 + 3}{2} = 1.5$$

a. Fungsi Trend linier

$$y_1 = a + bx_1$$

$$4.25 = a + b(1.5)$$

$$a = 4.25 - 1.5b$$

$$a = 4.25 - 1.5(0.975)$$

$$a = 3.14375$$

Rata-rata kelompok 2 ( $\bar{y}_2$ )

$$\frac{5.6 + 6.1 + 6.7 + 7.2}{4} = 6.4$$

Titik absis kelompok 2 ( $\bar{x}_2$ )

$$\frac{4 + 7}{2} = 5.5$$

$$y_2 = a + bx_2$$

$$6.4 = a + b(5.5)$$

$$6.4 = 4.25 - 1.5b + 5.5b$$

$$0.975 = b$$

Persamaan Trend  $\rightarrow y = a + bx \rightarrow y = 3.14375 + 0.975x$



b. Pelanggaran pada tahun 2017

$\gamma_{2017}$  indeks nilai  $x = 0$

$$\gamma = 3,44375 + 0,5375 (10)$$

$$\gamma_{2017} = 8,81875$$

//

2 Soal Latihan No 2 (semi rata 3)

Tahun	Pelanggaran	x	xy	x <sup>2</sup>
2006	2.9	-4	-4,6	16
2007	3.5	-3	-10,5	9
2008	4.0	-2	-8	4
2009	4.2	-1	-4,2	1
2010	5.0	0	0	0
2011	5.6	1	5,6	1
2012	6.1	2	12,2	4
2013	6.7	3	20,1	9
2014	7.2	4	28,8	16
<del>2015</del> Jumlah	45,2	0	32,4	60

$$\gamma = a + bx$$

$$a = \frac{\sum \gamma}{n} = \frac{45,2}{9} = 5,02$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{32,4}{60} = 0,54$$

a. Persamaan Trend  $\rightarrow \gamma = a + bx \rightarrow \gamma = 5,02 + 0,54x$

No. \_\_\_\_\_

Date : \_\_\_\_\_

b. Hitung peti taken 2016

Y 2016 maka  $x = 11$

$$Y = 5,02 + 0,5a(11) = 6,96 \text{ juta orang}$$