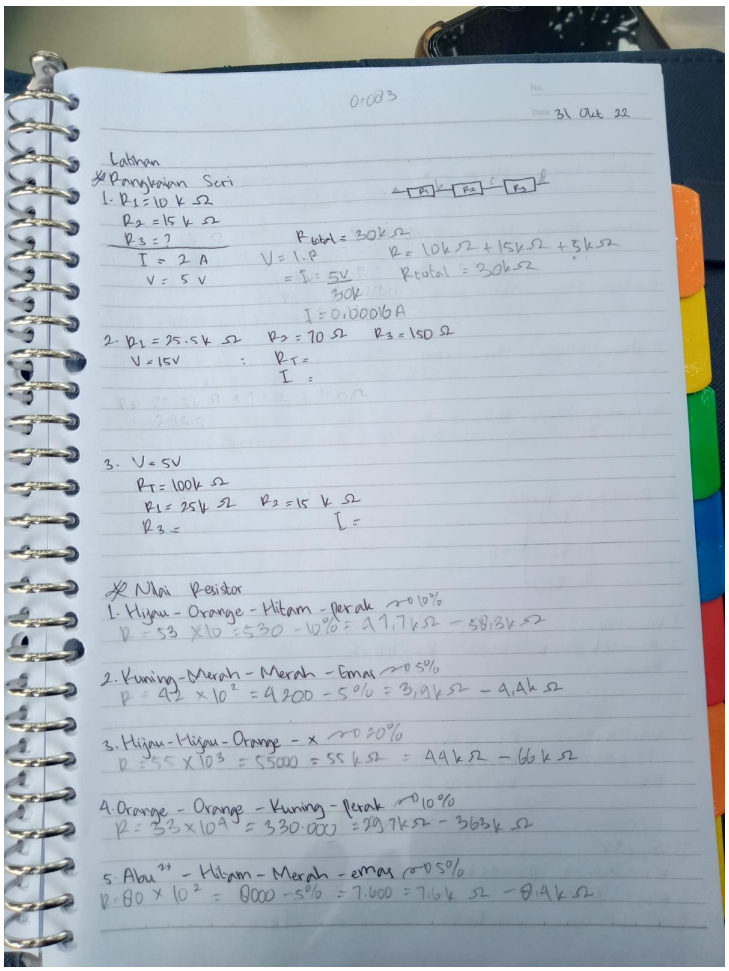
Nama:Sania Ratnaningsih
Prodi :Tekom C
Nim :233051022



6. Ungu - Hijau - Hitam - x ~ ±20%
R = 75 x 10 = 750 ± 20% = 60,0 kΩ — 90,0 kΩ

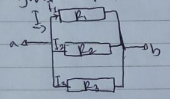
7. Ungu - Merah - Ungu - perak ~ 10%
R = 72 x 10^7 = 720.000.000 - 10% = 648 mΩ - 792 mΩ

8. Hijau - Hijau - Hijau — x ~ 20%
R = 55 x 10^5 = 5.500.000 - 20% = 9,4 mΩ — 6,6 mΩ

9. Biru - Hijau — Ungu - emas ~ 5%
R = 65 x 10^7 = 650.000.000 - 5% = 617,5 mΩ - 682,5 mΩ

10. Kuning - Hijau - Biru — x ~ 20%
R = 45 x 10^6 = 45.000.000 = 95 mΩ ± 36 mΩ - 54 mΩ

* Rangkaian Paralel

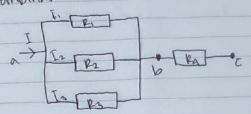


1. Vab = 15V
R1 = 15k Ω, R2 = 50 Ω R3 = 100 Ω
RT =

2. Vab = 5V R1 = 10 Ω
I1 = 0,5A R2 = 150 k Ω
RT = R3 = 200 Ω

3. Vab = 5V
R1 = 150k Ω, R2 = 25 k Ω
R3 = 100 Ω
I1 = I2 = I3 =

* Rangkaian kombinasi



1. $R_1 = 100\ \Omega$
   $R_2 = 1k\ \Omega$
   $R_3 = 15k\ \Omega$
   $R_A = 100k\ \Omega$
   $R_T =$

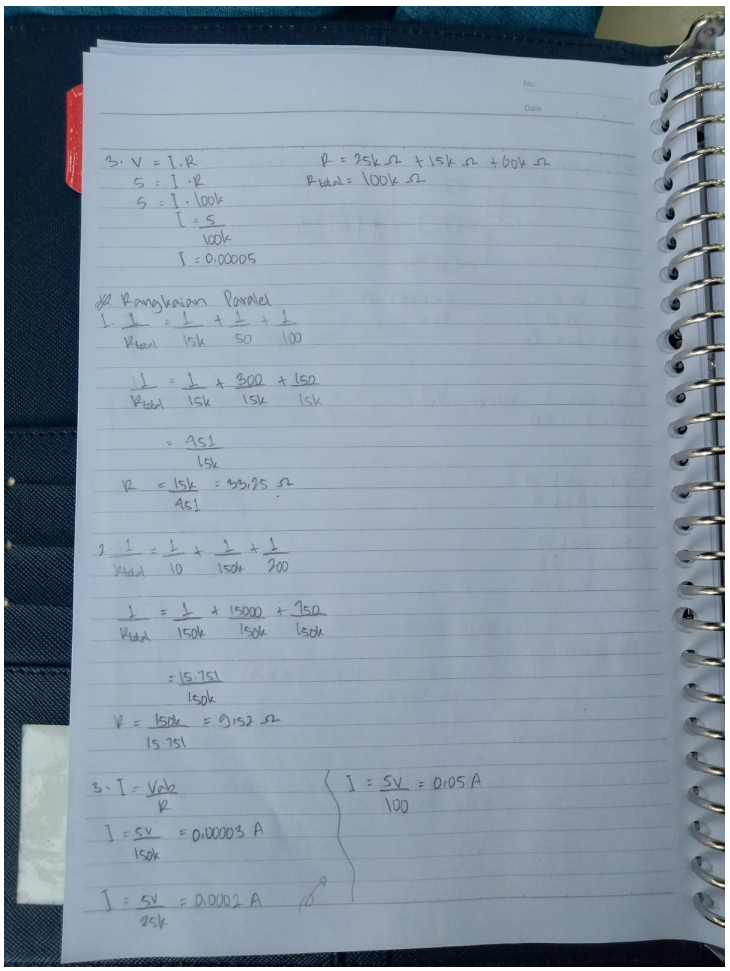
2. Dari soal 1 : berapa V_{bc} ?
   bila $I = 2A$

3. $R_1 = 100k\ \Omega$
   $R_2 = 47k\ \Omega$
   $R_3 = ?$
   $R_A = 150k\ \Omega$
   Bila $= I = 2A$
   $V_{BC} = 15V$

JAWABAN

* Rangkaian seri
1. $V = I \cdot R$
   $= I = \frac{5}{30k}$
   $I = 0,000166A$
   $R = 10k\ \Omega + 15k\ \Omega + 5k\ \Omega$
   $= 30k\ \Omega$

2. $V = I \cdot R$
   $15 = I \cdot 25.720$
   $I = \frac{15}{25720}$
   $I = 0,000583$
   $R = 25,5k\ \Omega + 70\ \Omega + 150\ \Omega$
   $R_{total} = 25.720\ \Omega$



3. $V = I \cdot R$
$5 = I \cdot R$
$5 = I \cdot 100k$
$I = \frac{5}{100k}$
$I = 0.00005$

$R = 25k\Omega + 15k\Omega + 60k\Omega$
$R_{total} = 100k\Omega$

Rangkaian Paralel

1. $\frac{1}{R_{total}} = \frac{1}{15k} + \frac{1}{50} + \frac{1}{100}$

$\frac{1}{R_{total}} = \frac{1}{15k} + \frac{300}{15k} + \frac{150}{15k}$

$= \frac{451}{15k}$

$R = \frac{15k}{451} = 33,25\Omega$

2. $\frac{1}{R_{total}} = \frac{1}{10} + \frac{1}{150k} + \frac{1}{200}$

$\frac{1}{R_{total}} = \frac{1}{150k} + \frac{15000}{150k} + \frac{750}{150k}$

$= \frac{15.751}{150k}$

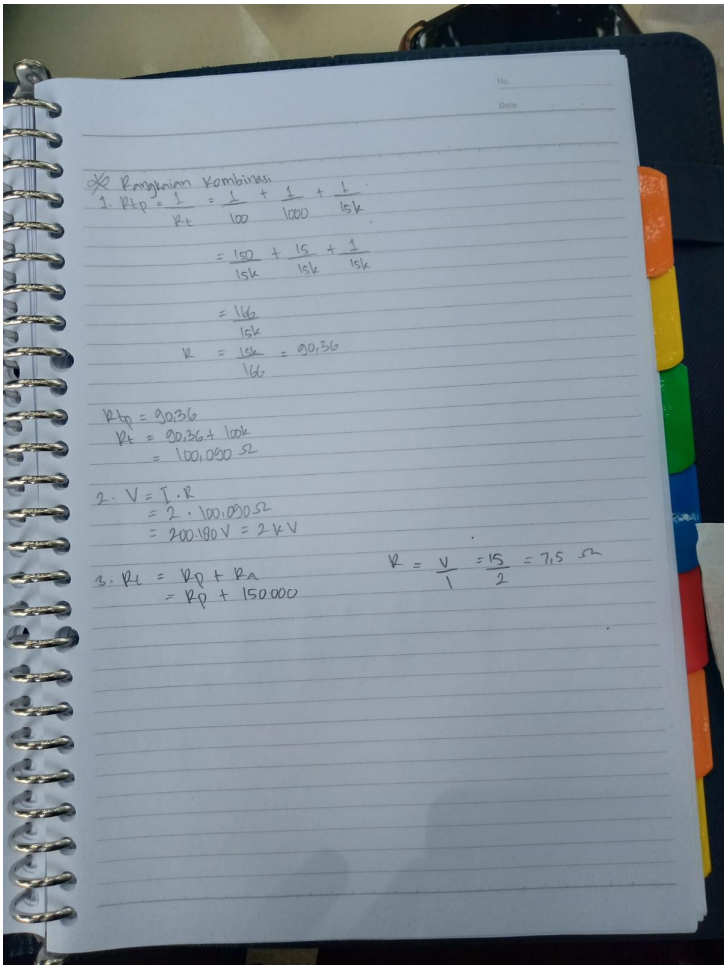
$R = \frac{150k}{15.751} = 9,152\Omega$

3. $I = \frac{V_{ab}}{R}$

$I = \frac{5V}{150k} = 0.000033\ A$

$I = \frac{5V}{25k} = 0.0002\ A$

$I = \frac{5V}{100} = 0.05\ A$



Rangkaian Kombinasi

1. $\frac{1}{R_t} = \frac{1}{100} + \frac{1}{1000} + \frac{1}{15k}$

$= \frac{150}{15k} + \frac{15}{15k} + \frac{1}{15k}$

$= \frac{166}{15k}$

$R = \frac{15k}{166} = 90,36$

$R_{tp} = 90,36$

$R_t = 90,36 + 100k$

$= 100.090\ \Omega$

2. $V = I \cdot R$

$= 2 \cdot 100.090\ \Omega$

$= 200.180\ V = 2\ kV$

3. $R_t = R_p + R_a$

$= R_p + 150.000$

$R = \frac{V}{I} = \frac{15}{2} = 7,5\ \Omega$