Ejercicios Capacitancia

1.

a) 12V — 120μF — 20μF

$C = 120\mu F + 20\mu F$

$C = 140\mu F$

b)

12V — 3μF — 6μF

$C = \frac{1}{\frac{1}{3} + \frac{1}{6}} = 2\mu F$

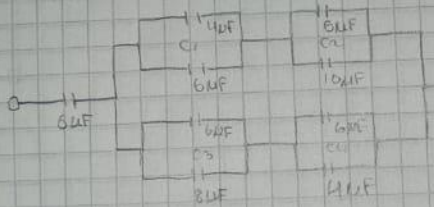
2.

200V — 3μF — 6μF — 4μF

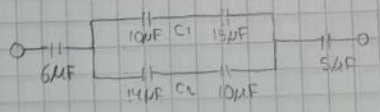
$C = \frac{1}{\frac{1}{6\mu F} + \frac{1}{5\mu F} + \frac{1}{4\mu F}}$

$C = 1.53\mu F$

3.

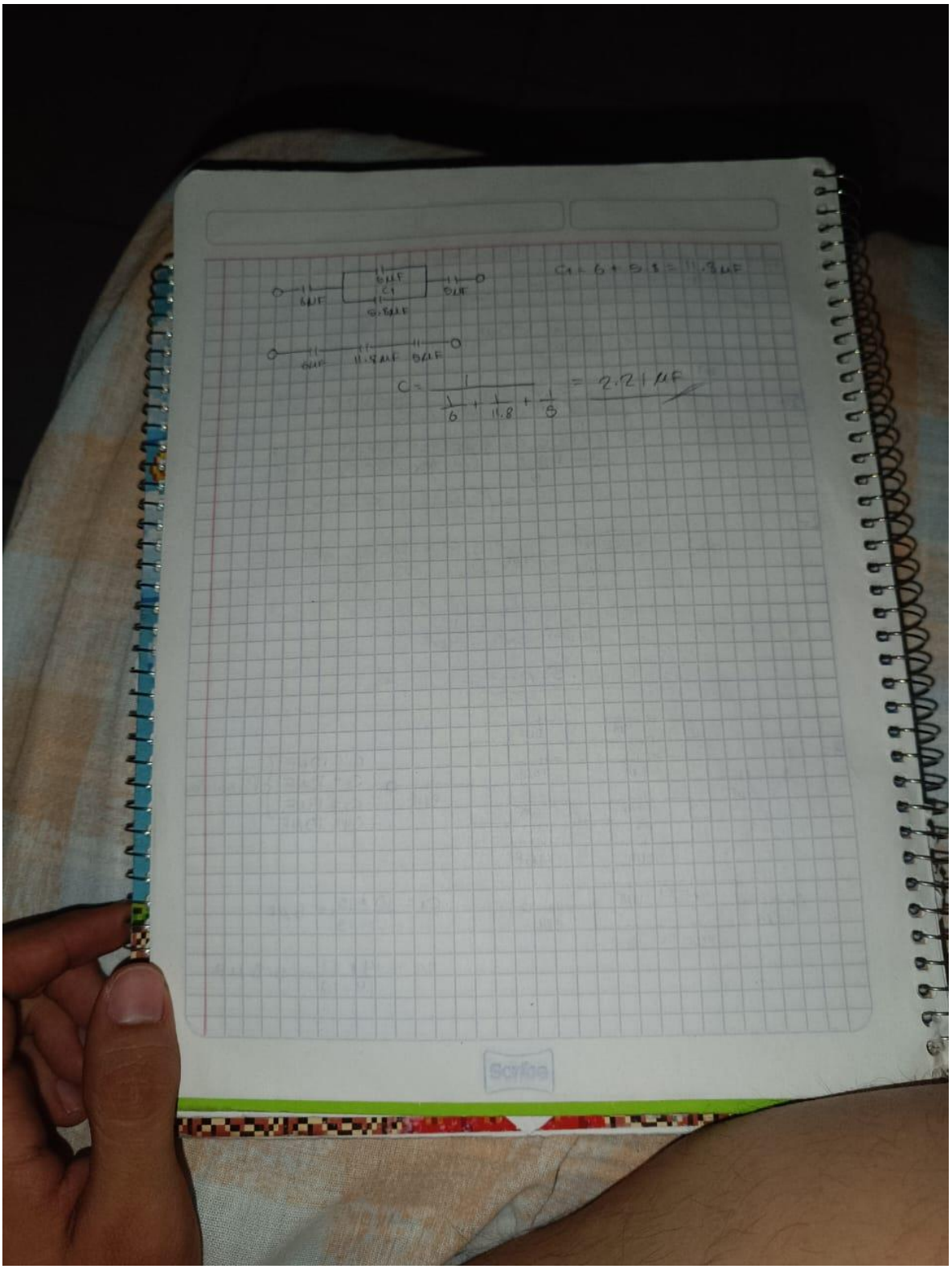


$C_1 = 10\mu F$
$C_2 = 15\mu F$
$C_3 = 14\mu F$
$C_4 = 10\mu F$
} Paralelos



$C_1 = \frac{10 * 15}{10 + 15} = 6\mu F$

$C_2 = \frac{14 * 10}{14 + 10} = 5.8\mu F$


6μF
C1
5μF
5.8μF
6μF
11.8μF
5μF
C = 1 / (1/6 + 1/11.8 + 1/5) = 2.21 μF