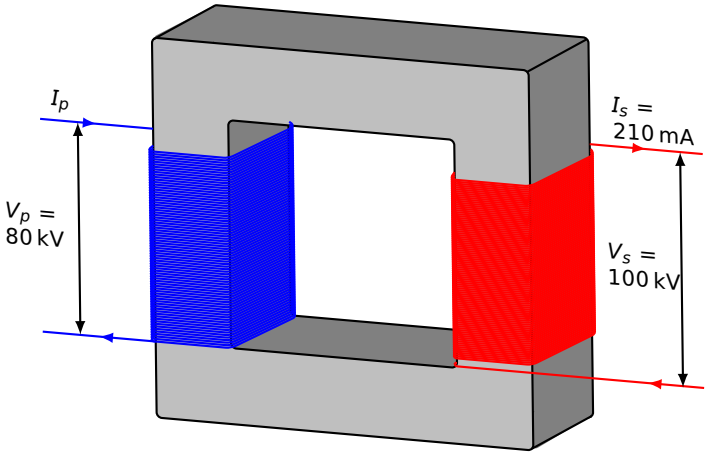
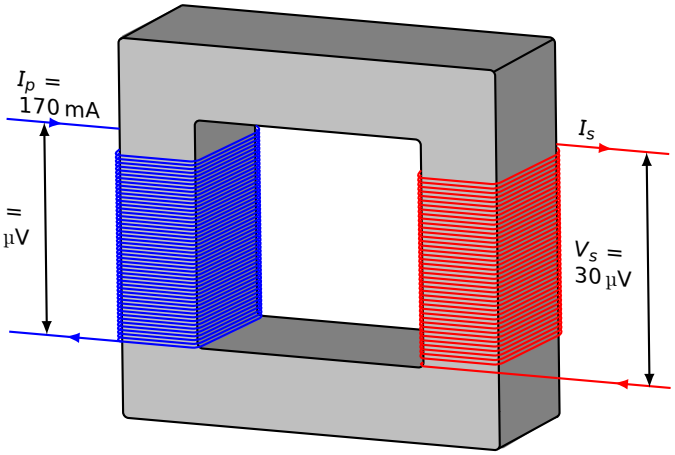
Calculate the potential difference across the primary, V_p or secondary coil V_s. The number of turns *drawn* on the diagram aren't accurate and assume the transformer is 100% efficient;

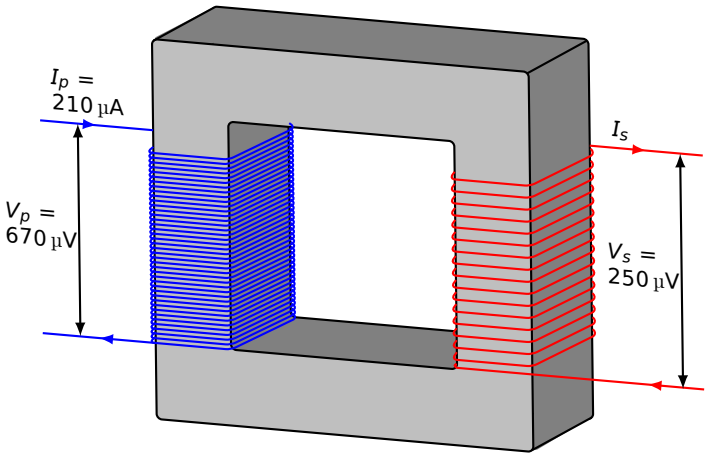
1)



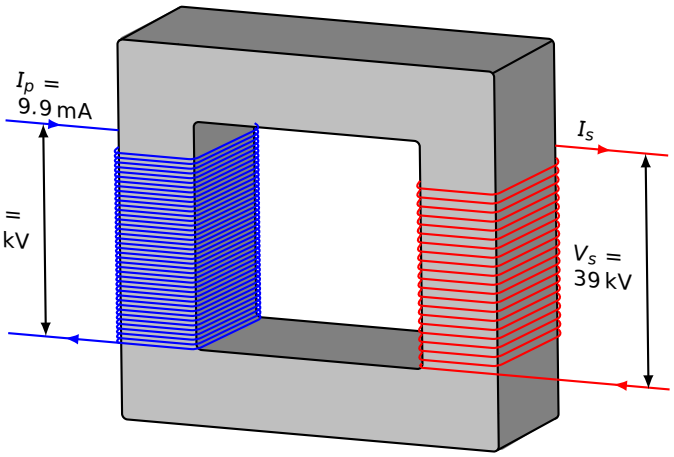
2)



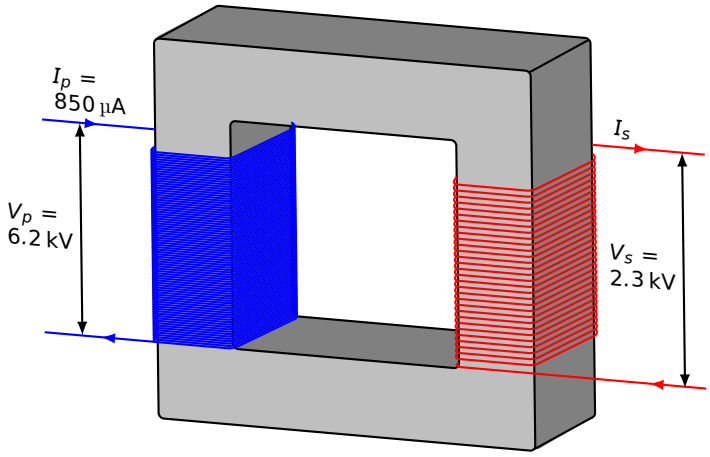
3)



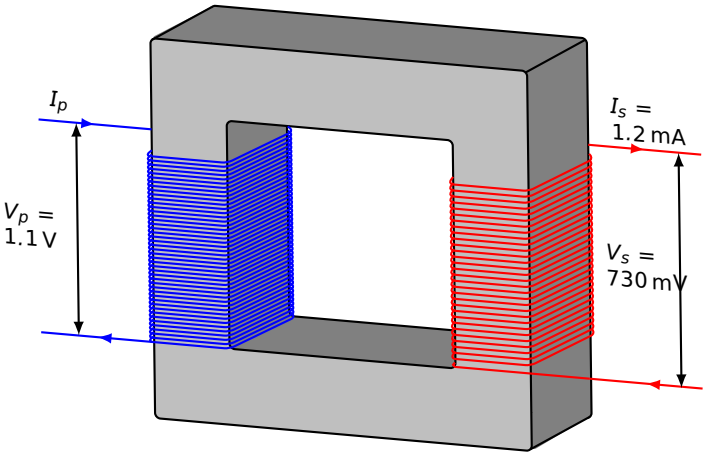
4)



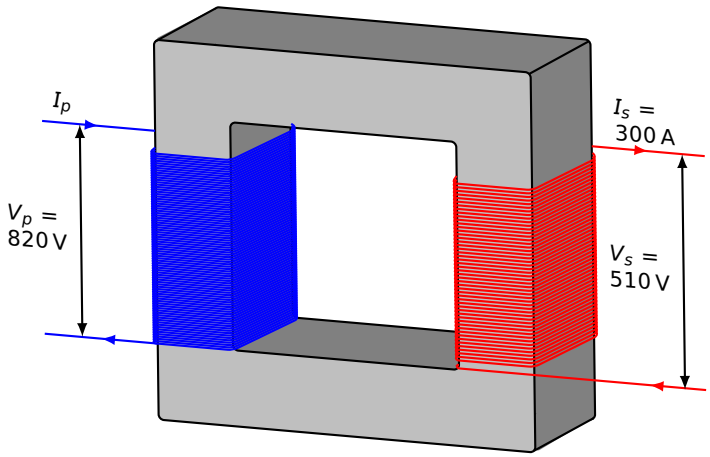
5)


I_p =
850 µA
I_s
V_p =
6.2 kV
V_s =
2.3 kV

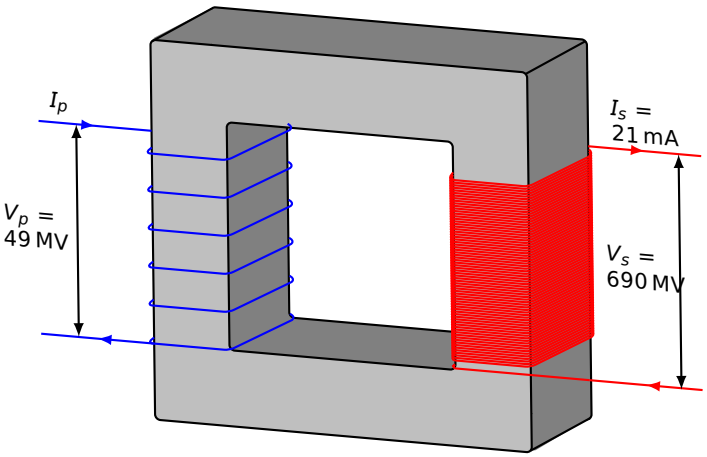
6)


I_p
I_s =
1.2 mA
V_p =
1.1 V
V_s =
730 mV

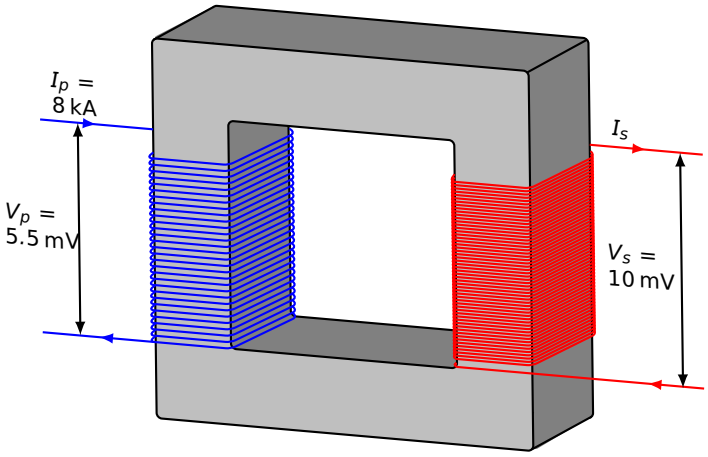
7)


I_p
I_s =
300 A
V_p =
820 V
V_s =
510 V

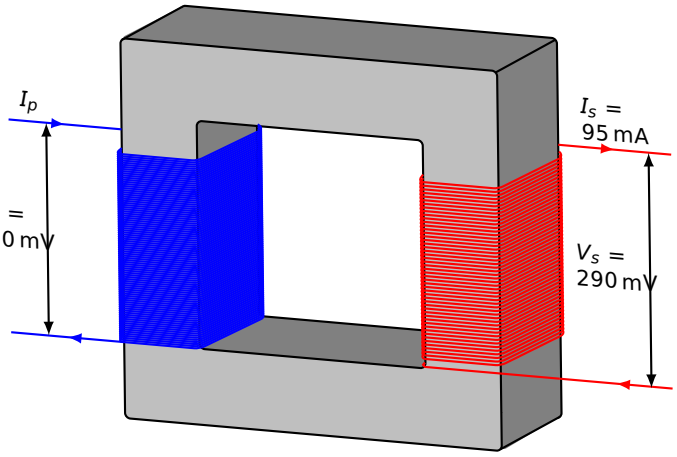
8)


I_p
I_s =
21 mA
V_p =
49 MV
V_s =
690 MV

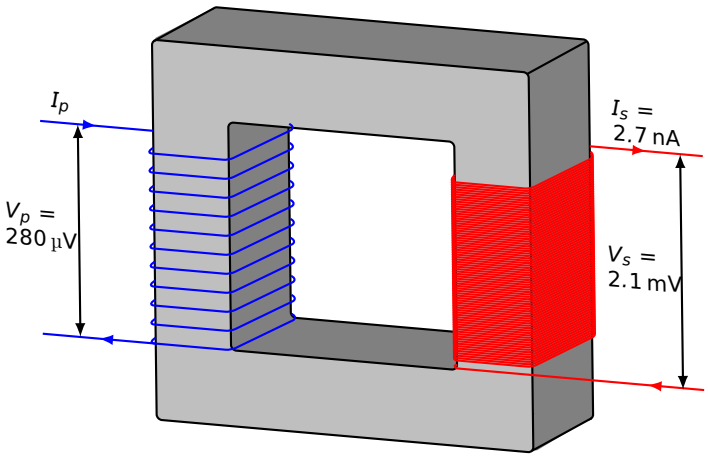
9)


I_p =
8 kA
I_s
V_p =
5.5 mV
V_s =
10 mV

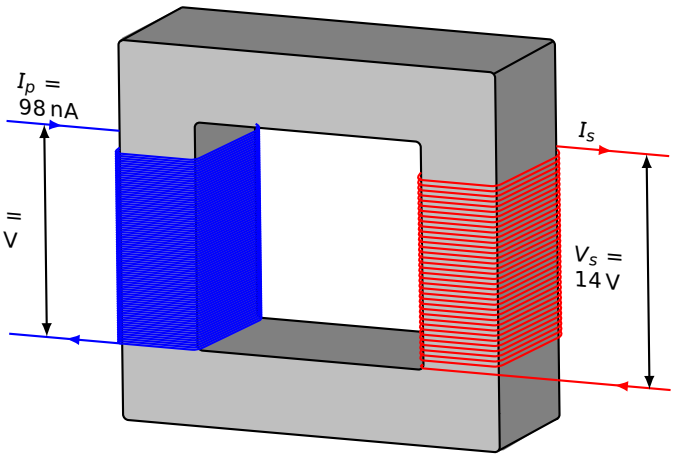
10)


I_p
I_s =
95 mA
V_p =
520 mV
V_s =
290 mV

11)


I_p
I_s =
2.7 nA
V_p =
280 µV
V_s =
2.1 mV

12)


I_p =
98 nA
I_s
V_p =
33 V
V_s =
14 V

Answers

1) $I_p = 260\,\text{mA}$
2) $I_s = 210\,\text{mA}$
3) $I_s = 560\,\mu\text{A}$
4) $I_s = 20\,\text{mA}$
5) $I_s = 2.3\,\text{mA}$
6) $I_p = 820\,\mu\text{A}$
7) $I_p = 190\,\text{A}$
8) $I_p = 300\,\text{mA}$
9) $I_s = 4.4\,\text{kA}$
10) $I_p = 53\,\text{mA}$
11) $I_p = 20\,\text{nA}$
12) $I_s = 220\,\text{nA}$