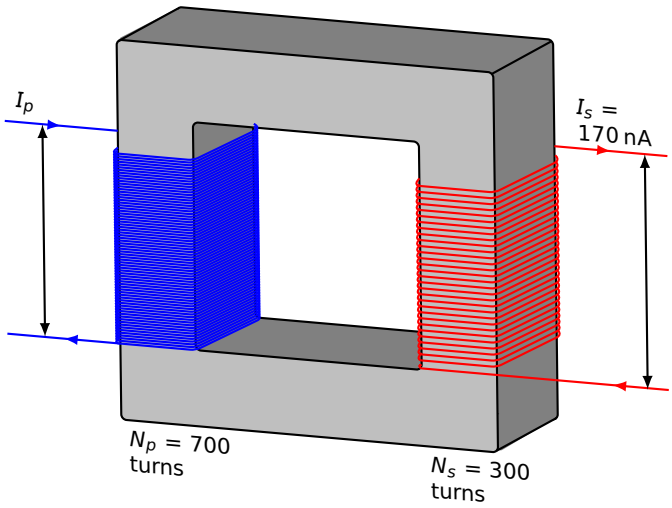
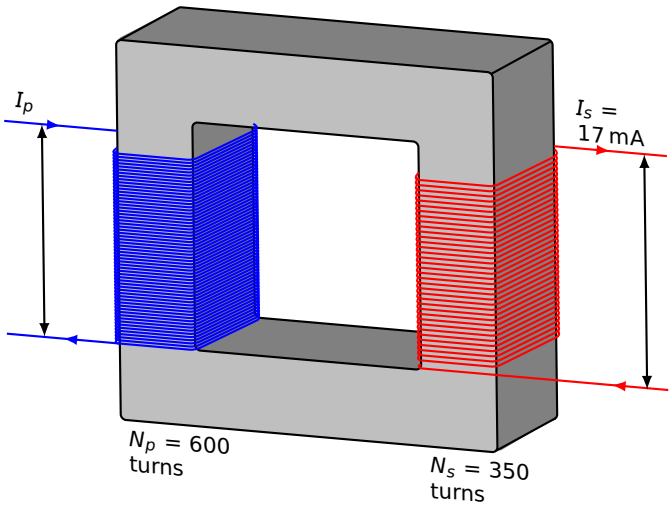
Calculate the current through the primary, I_p or secondary coil I_s. The number of turns *drawn* on the diagram aren't accurate and assume the transformer is 100% efficient;

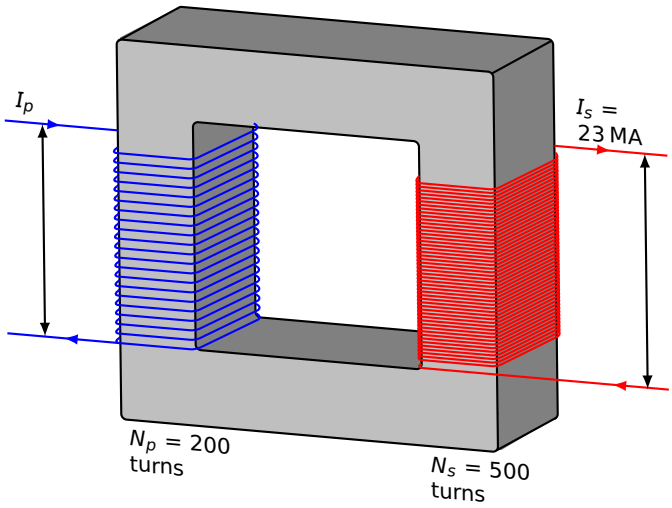
1)



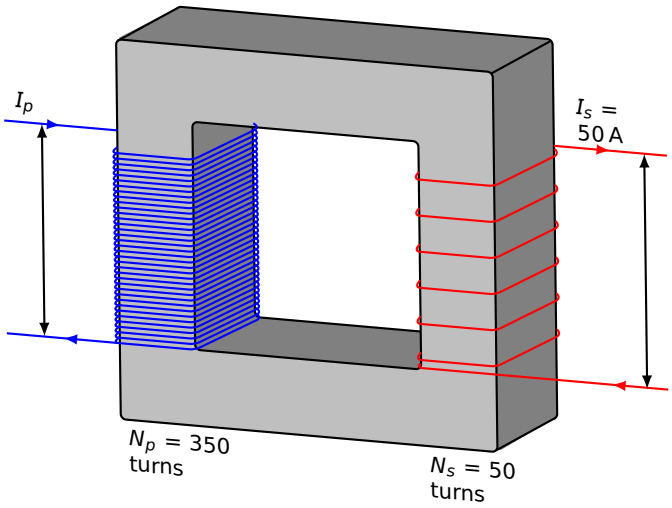
2)



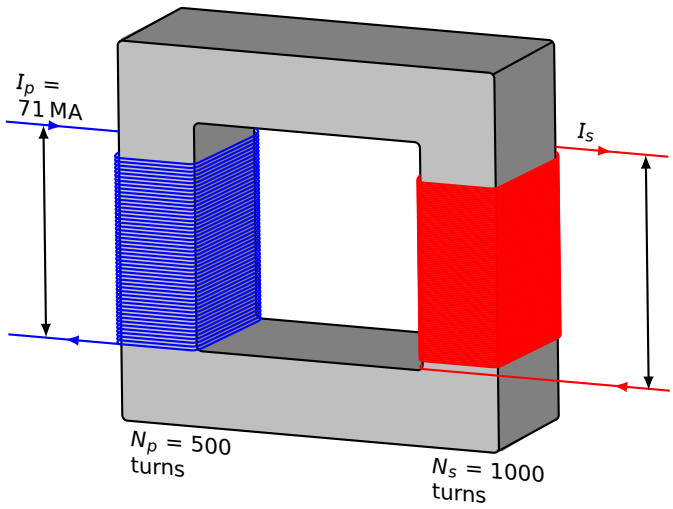
3)



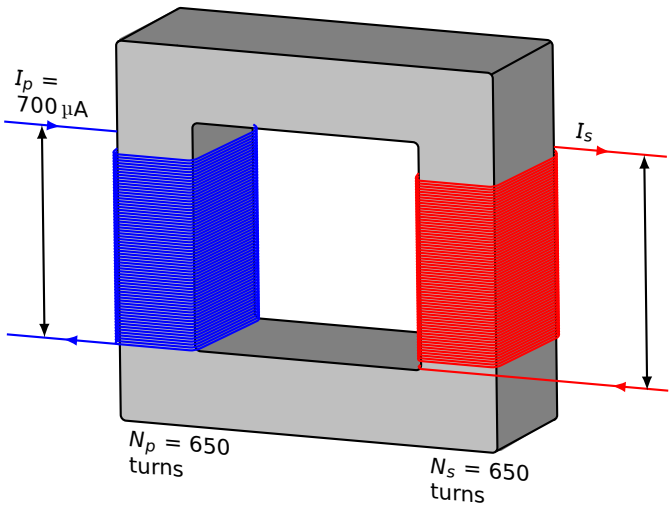
4)



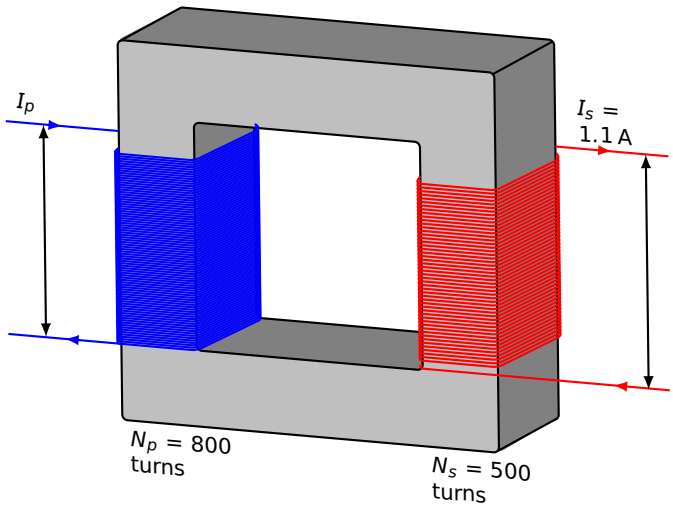
5)


I_p =
71 MA
I_s
N_p = 500
turns
N_s = 1000
turns

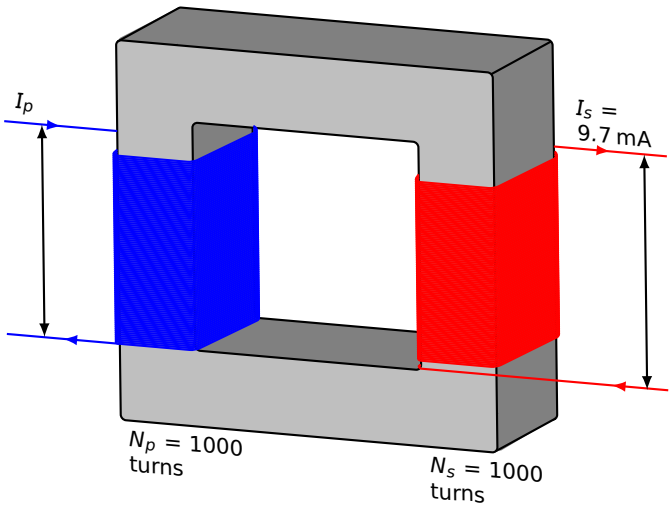
6)


I_p =
700 µA
I_s
N_p = 650
turns
N_s = 650
turns

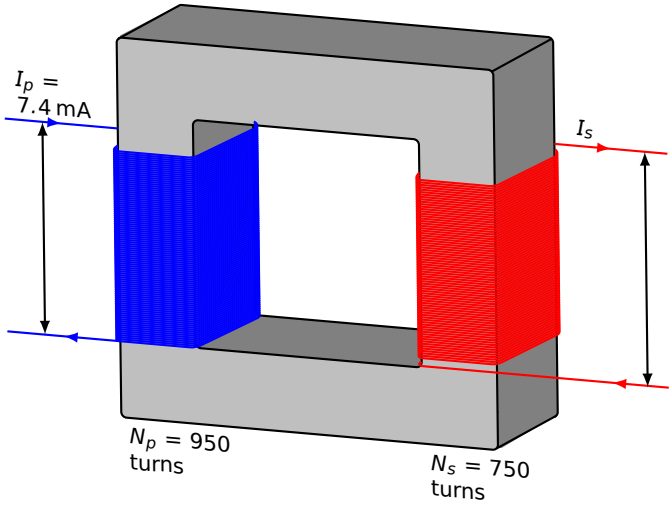
7)


I_p
I_s =
1.1 A
N_p = 800
turns
N_s = 500
turns

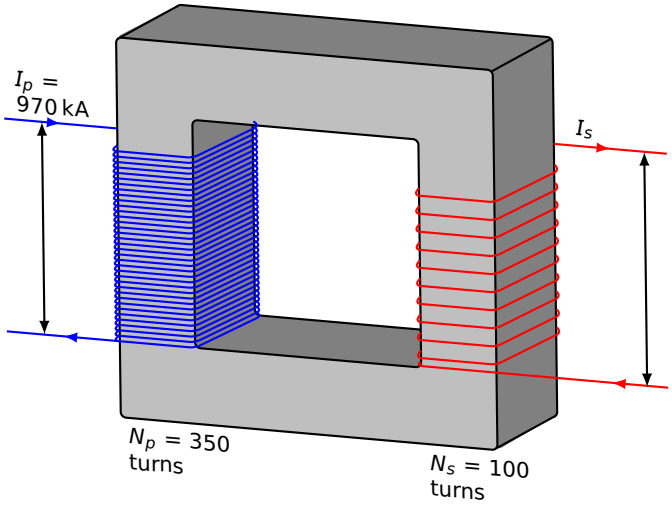
8)


I_p
I_s =
9.7 mA
N_p = 1000
turns
N_s = 1000
turns

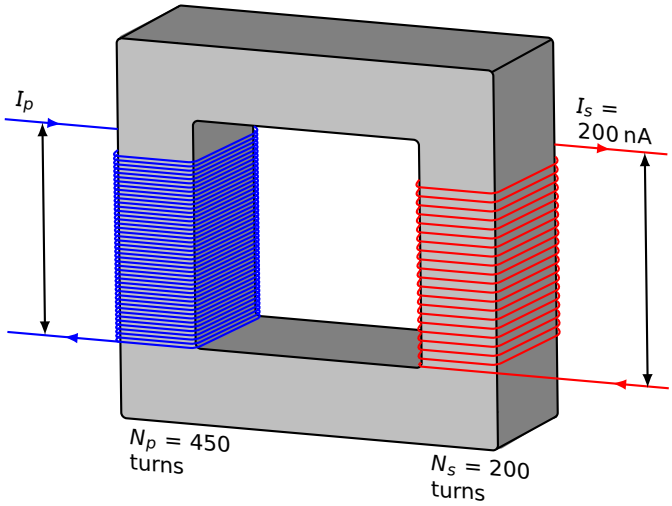
9)


I_p = 7.4 mA
I_s
N_p = 950 turns
N_s = 750 turns

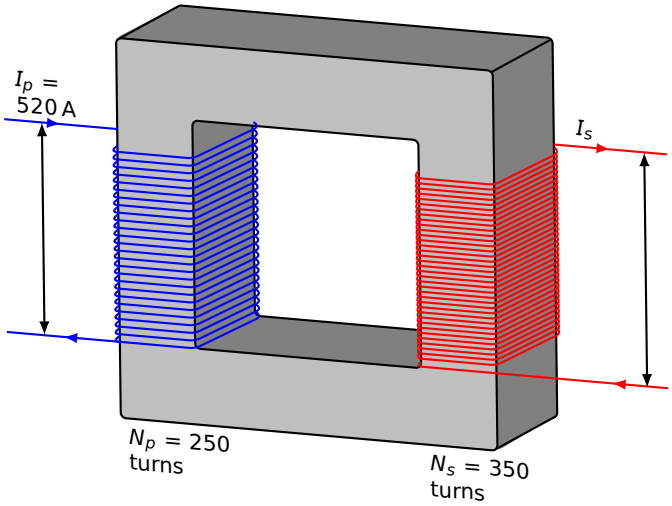
10)


I_p = 970 kA
I_s
N_p = 350 turns
N_s = 100 turns

11)


I_p
I_s = 200 nA
N_p = 450 turns
N_s = 200 turns

12)


I_p = 520 A
I_s
N_p = 250 turns
N_s = 350 turns

Answers

1) $I_p = 71\,\text{nA}$
2) $I_p = 9.7\,\text{mA}$
3) $I_p = 57\,\text{MA}$
4) $I_p = 7.2\,\text{A}$
5) $I_s = 36\,\text{MA}$
6) $I_s = 700\,\mu\text{A}$
7) $I_p = 710\,\text{mA}$
8) $I_p = 9.7\,\text{mA}$
9) $I_s = 9.4\,\text{mA}$
10) $I_s = 3.4\,\text{MA}$
11) $I_p = 87\,\text{nA}$
12) $I_s = 370\,\text{A}$