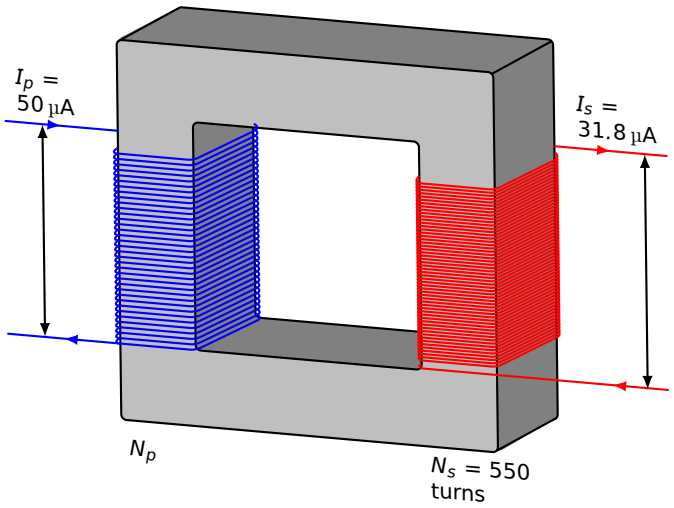
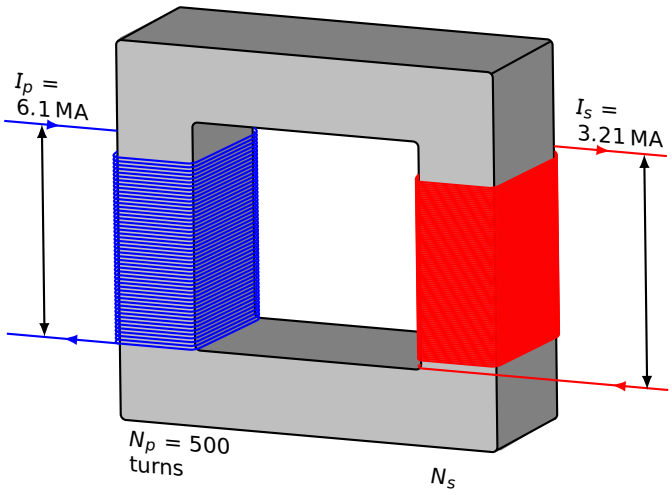
Calculate number of turns on the primary, $N_p$ or secondary coil $N_s$. The number of turns *drawn* on the diagram aren't accurate and assume the transformer is 100% efficient;

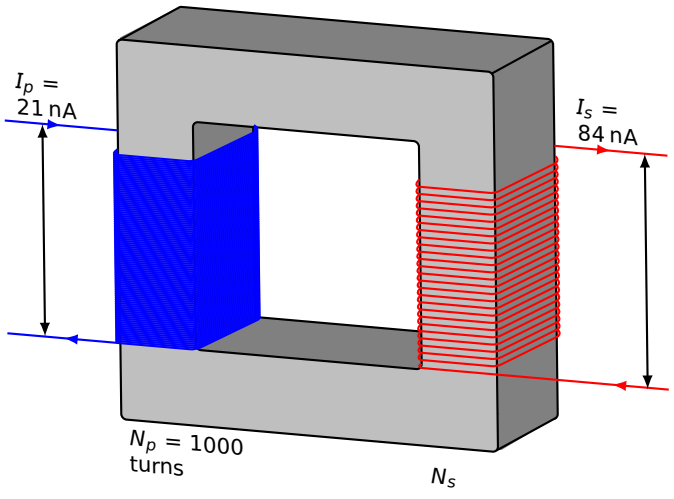
1 )



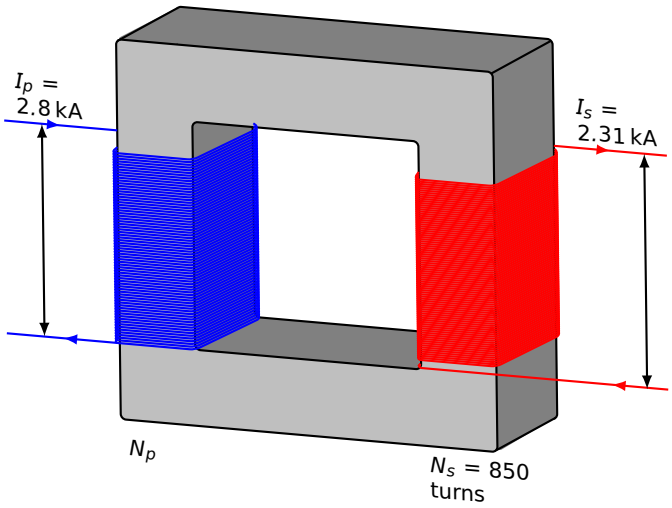

2 )



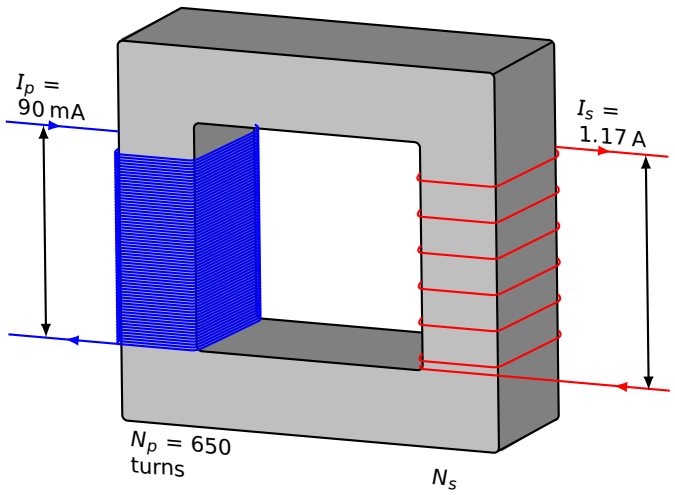

3 )



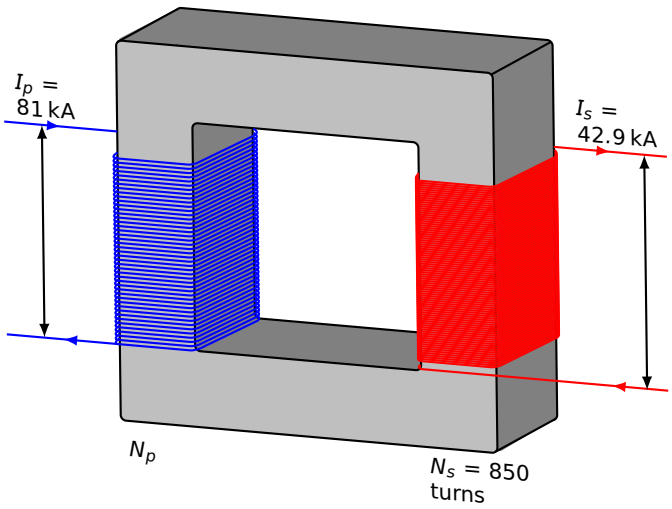

4 )



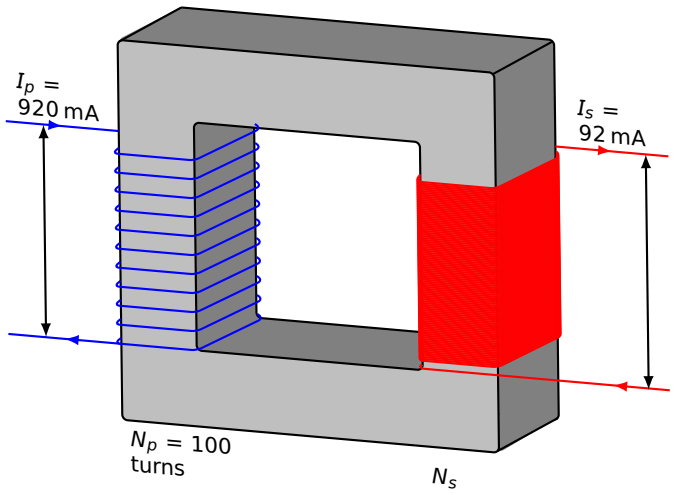
5 )


$I_p$ =
90 mA
$I_s$ =
1.17 A
$N_p$ = 650
turns
$N_s$

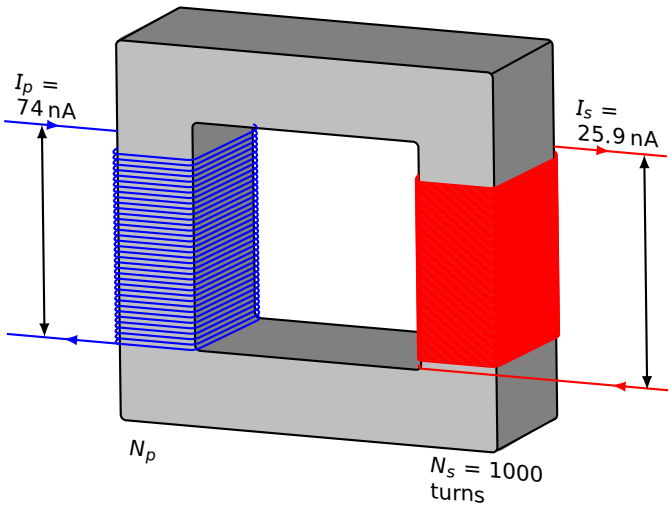
6 )


$I_p$ =
81 kA
$I_s$ =
42.9 kA
$N_p$
$N_s$ = 850
turns

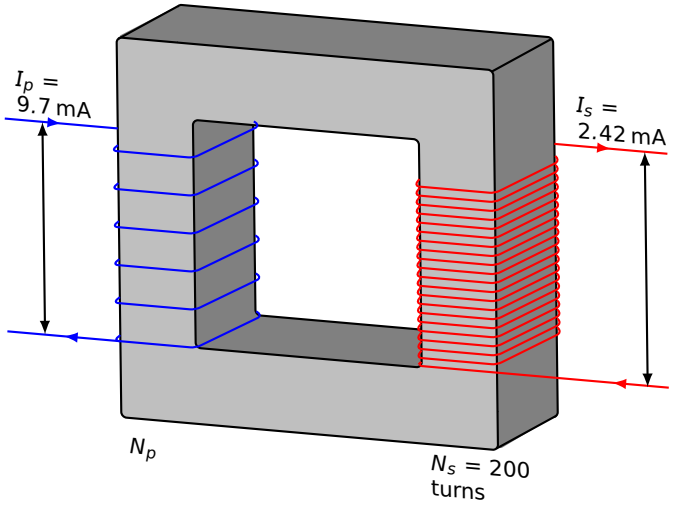
7 )


$I_p$ =
920 mA
$I_s$ =
92 mA
$N_p$ = 100
turns
$N_s$

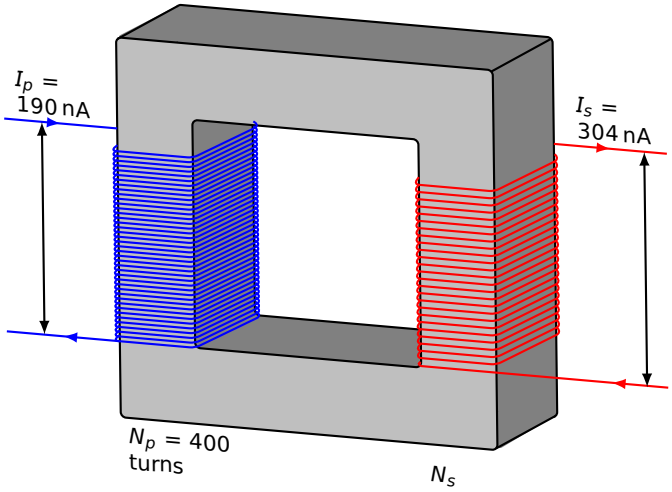
8 )


$I_p$ =
74 nA
$I_s$ =
25.9 nA
$N_p$
$N_s$ = 1000
turns

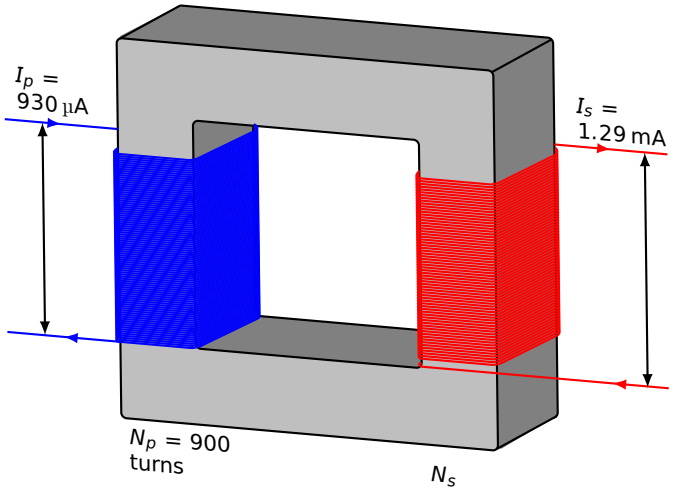
9 )


$I_p$ = 9.7 mA
$I_s$ = 2.42 mA
$N_p$
$N_s$ = 200 turns

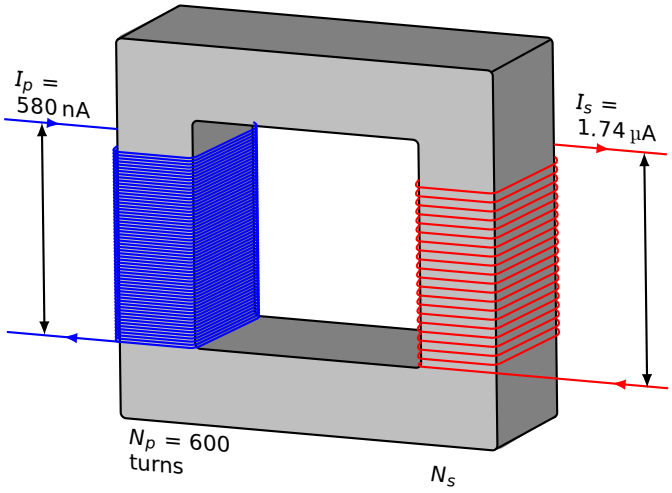
10 )


$I_p$ = 190 nA
$I_s$ = 304 nA
$N_p$ = 400 turns
$N_s$

11 )


$I_p$ = 930 µA
$I_s$ = 1.29 mA
$N_p$ = 900 turns
$N_s$

12 )


$I_p$ = 580 nA
$I_s$ = 1.74 µA
$N_p$ = 600 turns
$N_s$

## Answers

1) $N_p$ = 350 turns
2) $N_s$ = 950 turns
3) $N_s$ = 250 turns
4) $N_p$ = 700 turns
5) $N_s$ = 50 turns
6) $N_p$ = 450 turns
7) $N_s$ = 1000 turns
8) $N_p$ = 350 turns
9) $N_p$ = 50 turns
10) $N_s$ = 250 turns
11) $N_s$ = 650 turns
12) $N_s$ = 200 turns