

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
ELECTRICAL ENGINEERING DEPARTMENT
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EE-360

Key solutions

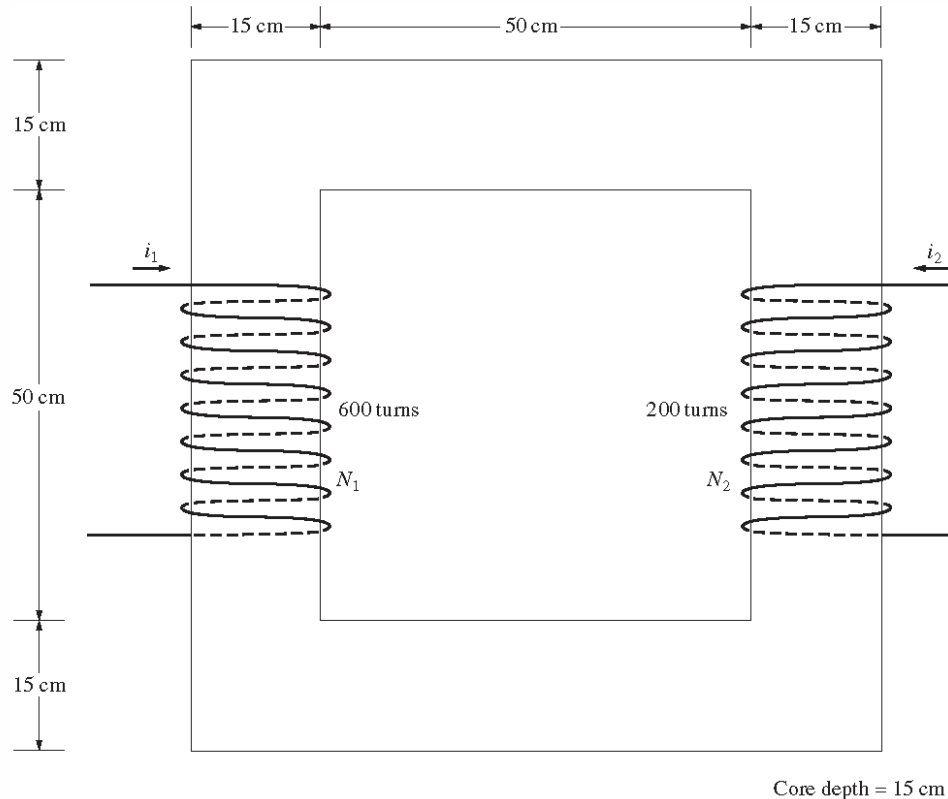
Quiz # 1 Serial #

Name:

I.D.#

Circle the correct answer.

1) A two-legged core is shown below. If $i_1 = -0.1$ A and $i_2 = -2.0$ A, and the relative permeability of the core is 2000. What would be the magnetic flux produced in the core. (5 Marks)



- a. 7.4 mWeber (flowing clockwise)
- b. 10 mWeber (flowing clockwise)
- c. 7.4 mWeber (flowing counter-clockwise)
- d. 10 mWeber (flowing counter-clockwise)**

2) When a ferromagnetic material is excited from a DC source, and the source is removed, the material will have some (...). This can be removed by applying (...) in the opposite direction of the original current direction. (5 Marks)

- a. flux residual, magnetomotive force.
- b. flux residual, corecive force.**
- c. flux leakage, magnetomotive force.
- d. flux leakage, corecive force.