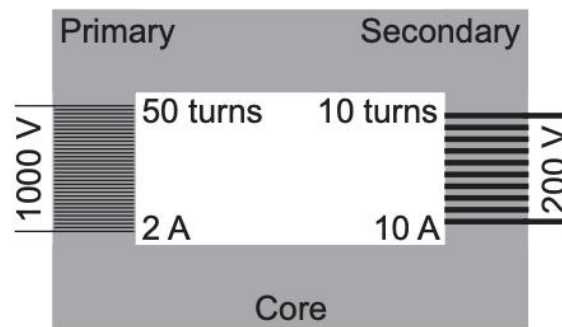


Question 9

(6 marks)

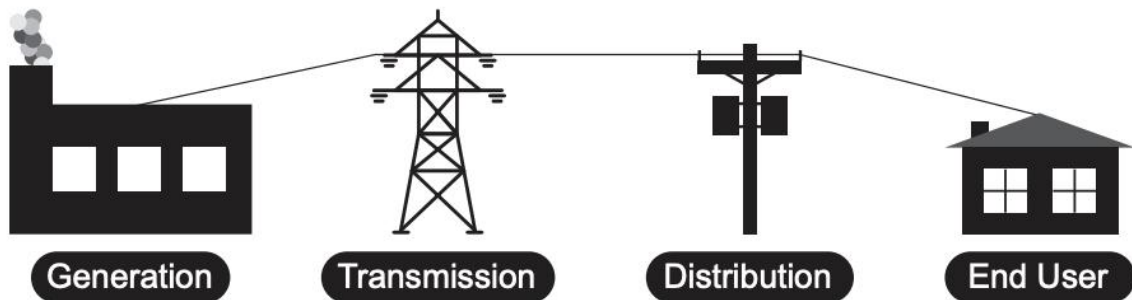


Transformers are an important element of electricity transmission.

- (a) Is the transformer in the diagram above a step-up or step-down transformer? Circle your answer. (1 mark)

A. Step-up

B. Step-down



- (b) Where would be the **most** likely placement of such a transformer in the electricity transmission process? Circle your answer. (1 mark)

A. After generation

B. After transmission

C. After distribution

- (c) Use a calculation to show how the transformer is 100% efficient. (2 marks)

- (d) In real life, 100% efficiency is impossible to achieve. Describe **one** way transformers lose efficiency. (2 marks)
