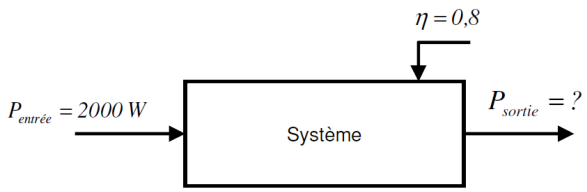
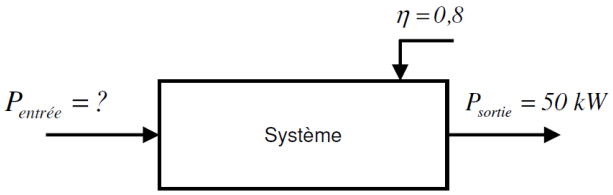
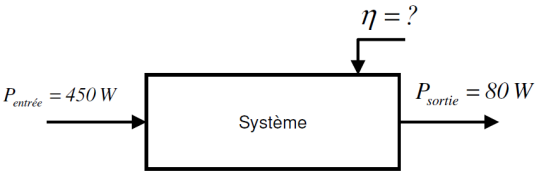
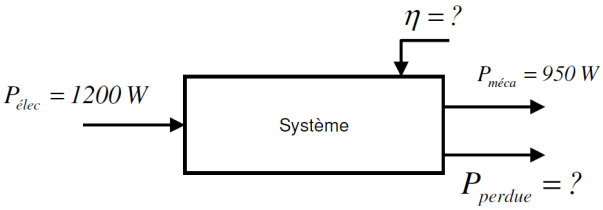
SI	**SCIENCES DE L'INGENIEUR** Test Chap. 6 - 04	Nom : _____ Prénom : _____	Note : / 20

Pour chaque schéma-bloc, calculer la(les) donnée(s) manquante(s).

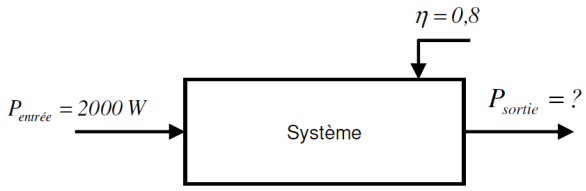




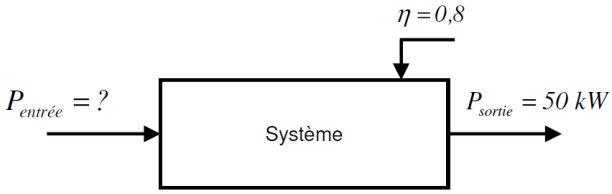




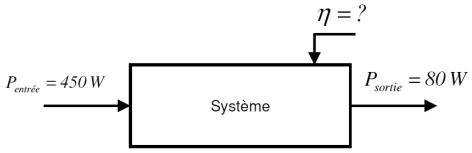
CORRECTION



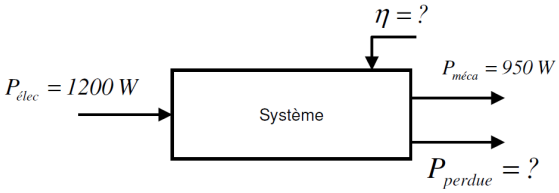
$$\eta = \frac{P_{sortie}}{P_{entrée}} \Leftrightarrow P_{sortie} = \eta \times P_{entrée} = 2000 \times 0,8 = 1600\ W$$



$$\eta = \frac{P_{sortie}}{P_{entrée}} \Leftrightarrow P_{entrée} = \frac{P_{sortie}}{\eta} = \frac{50}{0,8} = 62,5\ kW$$



$$\eta = \frac{P_{sortie}}{P_{entrée}} = \frac{80}{450} = 0,18$$



$$\eta = \frac{P_{méca}}{P_{élec}} = \frac{950}{1200} = 0,8$$

$$\sum P_{entrantes} = \sum P_{sortantes} \quad \text{(principe de conservation de l'énergie)}$$

$$P_{élec} = P_{méca} + P_{perdue} \Leftrightarrow P_{perdue} = P_{élec} - P_{méca} = 1200 - 950 = 250\ W$$