1. Using incremental model, derive the expression for equivalent impedance of the configurations shown below. You may assume all transistors are biased in saturation region and $r_{ds} \neq \infty$

![Diagrams](image1.png)

2. Using the results from Problem 1, determine the equivalent impedance for the configurations shown below. You may assume all transistors are biased in saturation region and $r_{ds} \neq \infty$

![Diagrams](image2.png)