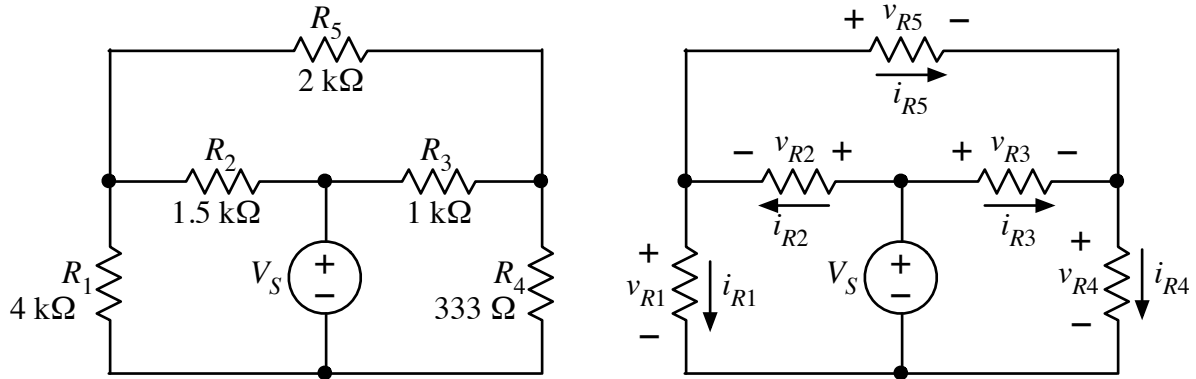In the circuit shown, use KCL, KVL, and Ohm's law to choose the value of V_S so that the the current through R_2 is 10 mA and the current through R_3 is 25 mA, with the voltages and currents defined at the right. How much power will be generated by the source?

$V_S =$ _____ ; $P_{VS} =$ _____