

Homework 8: Electric Safety

Because of a fault in wiring connections, a voltage of 230 V appears in bath room shower tap. The resistance between the floor and electrical system neutral (i.e. ground) has been measured to be 20 k $\Omega$ . A person whose body resistance is 1 k $\Omega$  takes a shower. How large a current flows through his/her body?

What is the consequence to the person? (use Thevenin's method for calculation).