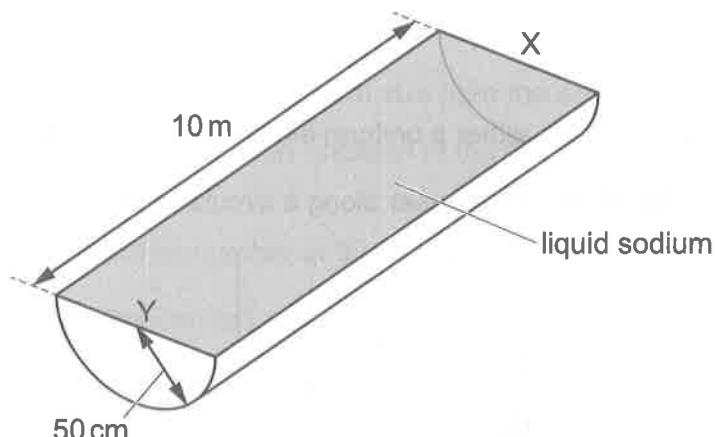


24 A semi-circular container is filled with liquid sodium, as shown.



The container has a radius of 50 cm and a length of 10 m.

The resistivity of liquid sodium is $4.9 \times 10^{-8} \Omega \text{m}$.

What is the resistance of the sodium between the ends X and Y of the container?

- A $6.2 \times 10^{-7} \Omega$
- B $1.2 \times 10^{-6} \Omega$
- C $6.2 \times 10^{-4} \Omega$
- D $1.2 \times 10^{-3} \Omega$

