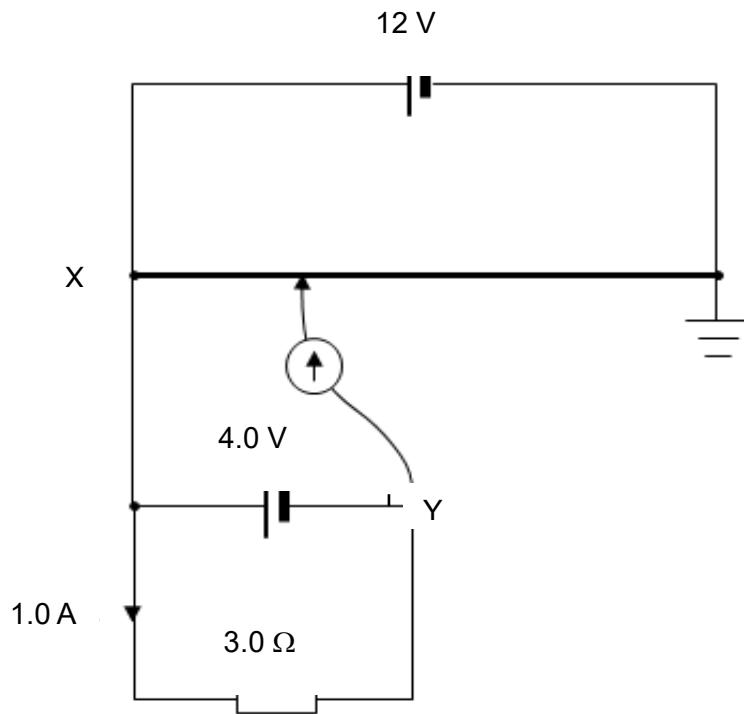


- 20** A 12 V cell with negligible internal resistance is connected to a resistance wire which is earthed at one end. Another cell of e.m.f. 4.0 V drives a current of 1.0 A through a $3.0\ \Omega$ resistor. The galvanometer is at zero deflection.



What are the potentials at X and Y?

	potential at X / V	potential at Y / V
A	0	-4
B	12	8
C	3	0
D	12	9