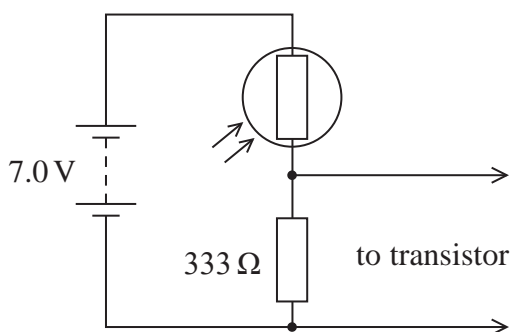
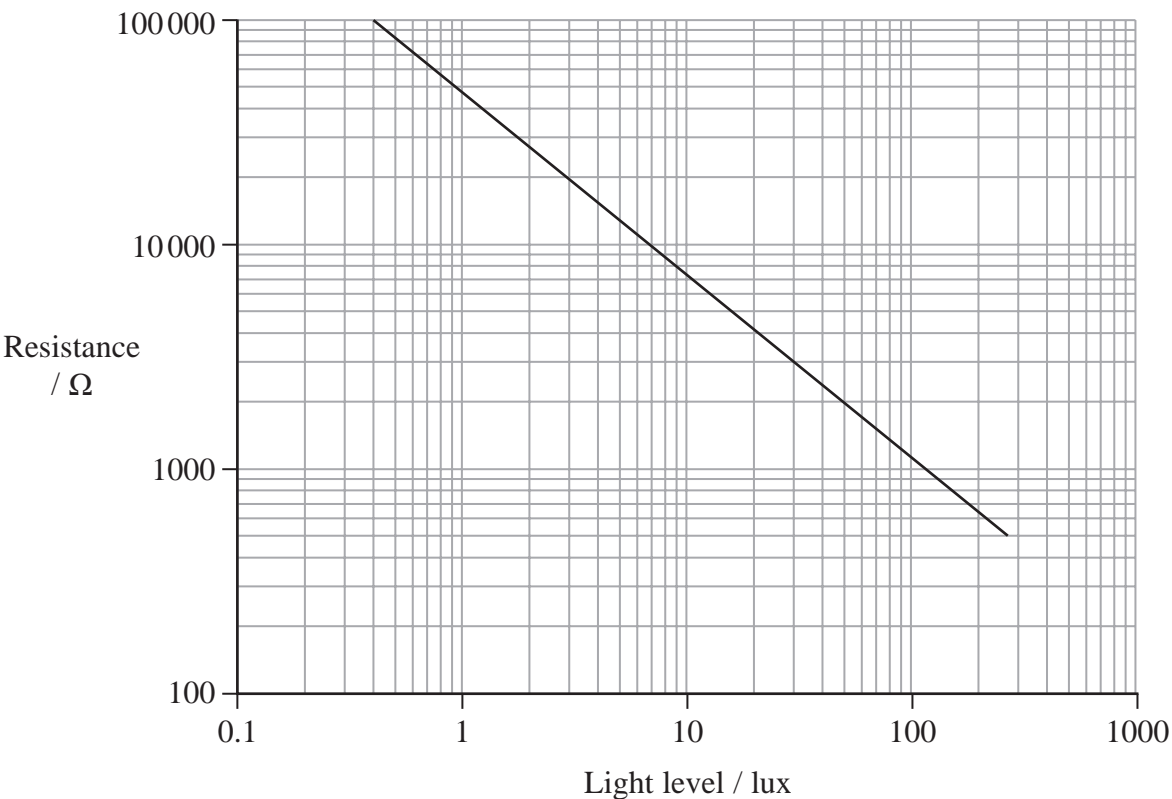


13 The circuit shown provides an input to a transistor. A transistor is a type of electronic switch and in this circuit it can be assumed to have infinite resistance.



The resistance of the LDR varies with light level as shown below.



The transistor switches on when the potential difference across the input increases above 0.7 V. This should happen as the light level reaching the LDR increases above 30 lux.

(a) Deduce whether this circuit responds as required.

(6)

(b) Explain how the resistance of the LDR changes as the light level increases.

(2)