

GCSE Physics A (Gateway)
J249/02 Physics A P5-P8 and P9 (Foundation Tier)

Question Set 17

1 (a) A TV has a power rating of 0.2 kW.

Calculate the energy transferred, in kWh, if the TV is switched on for 4 hours.

$$\text{Energy transferred} = 0.2 \times 4 = 0.8$$

$(P \times t)$

Energy transferred =0.8..... kWh

[3]

(b) A different TV works with a 12.0 V battery. It has a current of 3.19 A.

Calculate the power rating of the TV.

$$P = IV$$

$$P = 3.19 \times 12.0 = 38.28 \text{ W}$$

Power =38.28..... W

[3]

Total Marks for Question Set 17: 6

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