1   Many household electrical devices have a 'standby' mode. This means that the appliance is in a state of low power consumption while not in use.

Three devices are in standby mode.

Appliance	Standby power in watts
Television	5
Computer	5
CD player	4

1 (a) (i)   A homeowner goes away for a trip and is away for a total of 40 hours. Calculate the energy wasted, in kilowatt-hours by leaving all the appliances on standby mode for 40 hours.

Use the correct equation from the equation sheet.   **[2 marks]**

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                    Energy wasted = ... kWh

1 (a) (ii)   The cost of electricity is 11p per kilo-watt hour.

Calculate the cost of leaving the appliances on for 40 hours.   **[1 mark]**

....

....

....

                    Cost = ...

1 (b)   Here is some data about the television while switched on.

Power	200 watts
Efficiency	80%
Usage per day	1 hour

The cost of electricity is 11p per unit.

Calculate the cost of watching the television over a time period of 1 week (7 days).
                                                                        [3 marks]

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Cost = …………………………………………………………………………

1 (b) (i) Calculate the cost of the energy wasted by the television over 1 week.   **[2 marks]**

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Cost = …………………………………………………..…………………………

1 (b) (ii) What happens to the wasted energy?   **[1 mark]**

……

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(Total 9 marks)

End