Answer on question #58272, Physics / Electromagnetism

Question   A clothes dryer has a power rating of 4500w. How long did it take to dry a load of laundry if electric power costs $0.09 and the cost of using the dryer was $0.63?

Solution   As power cost 0.09 per kW, we can find how much power was used:

$$E = 0.63/0.09 = 7kW$$

Hence, time of drying:

$$t = 7000/4500 \approx 1.56\,hour$$