



Problem of the Week

Problem A and Solution

Power Savings

Problem

An electric clothes dryer uses approximately 5 kilowatt-hours of energy to dry a single load of laundry.

On average, Mary Lois's family washes 4 loads of laundry per week. If they use a clothes line instead of the electric dryer to dry half of their loads of laundry, approximately how many kilowatt-hours of energy will they save in a year?

Solution

Since half of 4 is 2, then on average Mary Lois's family uses the clothes line to dry two loads of laundry per week. This means they would save approximately $2 \times 5 = 10$ kilowatt-hours of energy each week. Since there are approximately 52 weeks in a year, we calculate the total savings as $52 \times 10 = 520$ kilowatt-hours of energy.