



Emily and Brian were deciding whether to have a solar electric system installed on their home's roof to reduce their electric bill and to help the environment. The contractor recommended a 5 kW (kilowatt) system using 25, 200 watt solar electric panels. The cost to them (after federal and local solar credits were applied) would be \$12,000.

1. If the solar system reduced their average \$200 monthly electric bill by 60%, how much money would they save on their electric bill each month and each year?
2. What would the payback period be in years? In other words, how many years would it take for their total savings on their electric bill to equal the upfront cost of installing the solar system? Round your answer to the nearest tenth of a year.