

Solving solar

Solar or PV (photo voltaic) panels generate electricity. Large solar arrays can provide electricity for the grid. Many people now have solar panels on the roof of their home or business.

They use the electricity generated directly for their power needs, but any excess electricity can feed into the grid for use by other grid users. At night or when their power needs are greater than what the solar panels can provide, they can also draw from the grid.

Can you solve the problems?

1. Teesha wants to get solar panels for her home. She lives alone with her cat but she has heating for the winter and cooling for the summer and she uses electricity to heat her water.

Her daytime power needs are 11KWh. She is looking at solar panels that provide 2KWh each a day.

How many solar panels does she need to cover her daytime needs? _____

How much power will she not use herself that will feed into the grid? _____KWh

2. Fred runs a manufacturing factory with lots of large machines. He wants to know how much power he will still need from the grid if he installs 20 solar panels on his factory roof.

His daily power consumption is 75KWh. The solar panels he will use provide 3KWh.

How much power will he need from the grid?
_____KWh

