

## The ski jump

The organisers of a winter festival are planning to construct a ramp to be used as a ski jump in the main street of town.



They are going to make snow with a machine that uses 4 gallons of water every minute (15.14 L per min) and can only function when the air temperature low enough. They estimate that they will have 6 hours of time overnight to make snow.

If the ramp is supported by posts that can hold up to 500 kg each, how many posts will be needed for the structure to safely hold the snow that will be made?