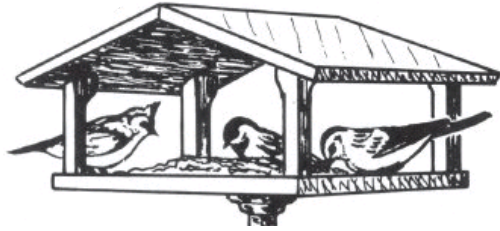


Mathematics Problem of the Week

Problem number 255

Posted Monday March 16th 2015

Submit by noon, Monday March 23rd 2015



Jory has a very large bird feeder in his yard. On May first he adds 1 litre of bird seed that contains 25% millet. The birds do not like the millet and each day they eat only $\frac{1}{4}$ of the millet in the feeder while eating all of the other seeds. Each morning Jory adds 1 litre of the same mixture to the feeder.

What is the first day in which the feeder will contain 50% or more millet immediately after he adds the new seed to the feeder?

Submit your solution by

- emailing it to MathProblem@kpu.ca
- putting it in the MPOW box in the Math Assistance Centre on the Surrey campus (library, main floor)
- putting it in the MPOW box in the Learning Centre on the Richmond campus (located in the library)
- giving it to Lin Hammill (Surrey Fir 348) or Judy Bicep (Richmond 3335)

Be sure to include your name. In order to be eligible for the prize, KPU students should also include their student numbers. Winners names will be posted on the Problem of the Week web page. You can have the Problem of the Week emailed to you each week. Just go to the website and sign up.

Web site: <http://www.kpu.ca/mathematics-problem-week> .