

# Mathematics Problem of the Week (255)

This week's winner is:

**Matt Potma**

Contact Lin Hammill (Surrey Fir 348) or Judy Bicep (Richmond,3335) for your prize or email [MathProblem@kpu.ca](mailto:MathProblem@kpu.ca).

Also submitting correct solutions to problem 255 were:

**Brady Schmidt, David Luna, and Suzanne Pearce**

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### Problem 255 solution:

We will set up a table.

Date	Millet after adding new seed	Total seed after adding new seed	Ratio of millet to total seed	Millet left at the end of the day
May 1	0.25	1	0.25	0.1875
May 2	0.4375	1.1875	0.368421	0.328125
May 3	0.578125	1.328125	0.435294	0.433594
May 4	0.683594	1.433594	0.476839	0.512695
May 5	0.762695	1.512695	0.504196	0.572021
May 6	0.822021	1.572021	0.522907	0.616516
May 7	0.866516	1.616516	0.536039	0.649887
May 8	0.899887	1.649887	0.545423	0.674915
May 9	0.924915	1.674915	0.552216	0.693686

The millet at the start of the day is the millet left at the end of the previous day plus  $\frac{1}{4}$  of the new seed added, that is, plus  $\frac{1}{4}$  of a litre.

The millet left at the end of the day is  $\frac{3}{4}$  of the millet at the start, immediately after the new seed is added.

The total seed after adding the new seed is the millet left over at the end of the day plus the 1 litre of new seed added.

