

# Mathematics Problem of the Week

Problem Number: 285

Posted on Monday, September 26, 2016

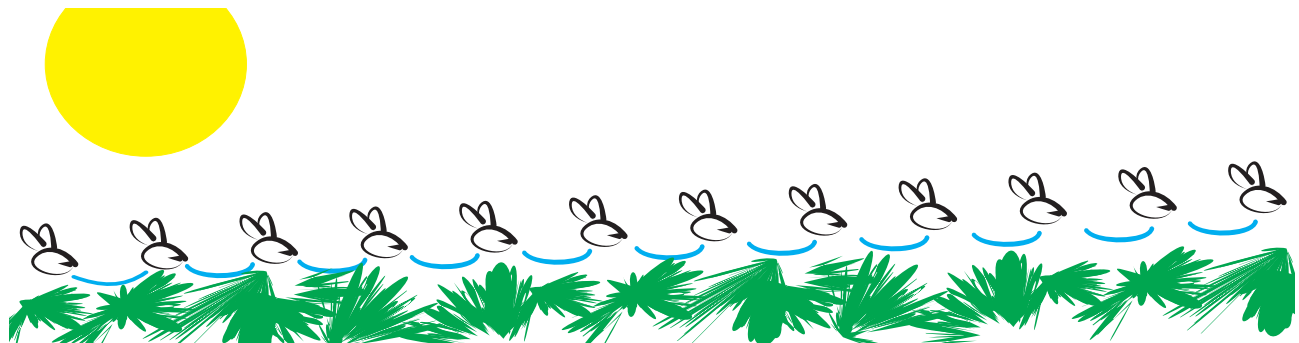
Deadline: Monday, October 03, 2016 at noon

## Twelve Bunnies

Playing “Hop Game” is very popular in bunnies world. An even number of bunnies on a line want to see if they can be partitioned in pairs such that the first pair are one hop apart, the second pair are two hops apart, the third pair are three hops apart and so on. For example, here is an answer to the game of 8 bunnies. The bunnies labelled 1 are one hop apart, the pair labelled 2 are two hops apart, the pair labelled 3 are three hops apart and the last pair, labelled 4, are four hops apart.



How about the game with 12 bunnies? Can a set of 12 bunnies play the hop game?<sup>1</sup>



<sup>1</sup>For immediate assistance with this problem, email Asiyeh at [asiyeh.sanaei@kpu.ca](mailto:asiyeh.sanaei@kpu.ca) or Vicky at [siqi.wei@kpu.ca](mailto:siqi.wei@kpu.ca).