

Problem of the Week

Problem B

Double Trouble

Riley Waters has decided to join Facebook™. A week after posting his profile, he discovers he has two friends! After another week, his number of friends has doubled to four. At the end of the third week, his total number of friends has doubled yet again to 8.

- a) If his number of friends continue to double each week, how many friends will Riley have at the end of 6 weeks? Create a T-chart to show your calculations.
- b) Continue your chart to show how many friends Riley would have after 10 weeks.
- c) How long would it be until Riley has more than 15 000 friends?
- d) There are about 34 million people in Canada. How long will it be until Riley is friends with at least that many people?



Check out other CEMC resources at:

<http://cemc.uwaterloo.ca/resources/resources.html>

STRAND: PATTERN/ALGEBRA

