## Kwantlen Polytechnic University

Mathematics Problem of the Week
Problem number 279
Posted Monday Feb 29, 2016
Submit by noon, Monday March 7, 2016

## The Bank of Monte Carlo

In this game a board is divided into six numbered squares as shown. Players are invited to place a stake on whichever number(s) they choose. Three regular dice are then thrown, and whoever has correctly placed a stake on a number that comes up gets their stake back, plus the same again each time the number has come up. So someone betting $\$ 1$ on 3 when $3,3,4$ was thrown would get $\$ 1+2$ times $\$ 1=\$ 3$ back.

What is the chance of winning?

| 1 | 2 | 3 |
| :--- | :--- | :--- |
| 4 | 5 | 6 |



[^0]Web site: http://www.kpu.ca/mathematics-problem-week .


[^0]:    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 Tariq Nuruddin (Surrey A3670)
    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.

