

Problem of the Week

Math Tutoring Center

Renton Technical College

WIN \$5.00 IN "BAKERY BUCKS"

Submit the correct answer to the following Problem of the Week before next Monday (05/07/12) at 6 PM and you will be eligible to win \$5.00 in "Bakery Bucks".



Problem of the Week:

In the Powerball lottery, 5 balls are chosen at random from 59 white balls and 1 ball is chosen at random from 35 red balls. To win the jackpot, a player must match all 5 white balls and the red ball without regard to order (i.e. drawing 1-2-3-4-5 is treated the same as if 4-3-5-2-1 was drawn). The odds of doing this are about 1 in 175 million. Suppose the Powerball lottery was changed so that order did matter (i.e. 1-2-3-4-5 is treated differently than 4-3-5-2-1). Calculate the new odds. Give your answer as odds rounded to the nearest 0.001 billion. (e.g. 1 in 55.555 billion).

Here are the rules for submitting answers to the problem of the week and the prizes with winning:

- Any RTC student or employee can submit an answer.
- Answers must be submitted in writing, on a piece of paper, in person at the Math Tutoring Center no later than 6 PM on Monday (05/07/12) **(NO email submissions will be accepted)**.
- Please include your name, phone number or email address on your submission so that you can be contacted if you are the winner.
- The winner will be notified by email or phone.
- All "Bakery Bucks" not claimed within one week will be forfeit.
- "Bakery Bucks" can only be used at the RTC Bakery.
- No change will be given on any purchases paid for with "Bakery Bucks"
- Any part of a purchase that exceeds the amount of the "Bakery Bucks" is the responsibility of the purchaser.



Renton Technical College
Math Tutoring Center
Building C (Library Building), Room C105
3000 NE 4th St
Renton, WA 98056
Email: mtc@rtc.edu