

ONE-STAGE PROBABILITY (GAMBLING)

APPLICATIONS

THE LOTTERY

Here is the result notice for a special charity lottery. Use it to answer the questions.

Official Lottery Result

1st Prize of \$250 000 No. 34603 **One-off 1st Prize, \$1000 each**
'Just Wishing' syndicate, NFP Hay 34602 34604

2nd Prize of \$50 000 No 30432
'New House' K Ross, Gymea Bay Rd, Gymea

3rd Prize of \$5000 No 33800 **2 Prizes of \$1000**
S Jones, The Kingsway, Cronulla 85845 46751

6 Prizes of \$500
1567 58946 64883 72040 92272 99977

12 Prizes of \$250
1193 1933 27224 45986 50740 59158
77125 94087 95404 105169 128026 157028

56 Prizes of \$100
207 30012 68487 95775 144870 164121 179867 191006
984 33393 70475 100027 146892 168345 181246 192203
5941 35062 73533 101188 150025 169566 184711 193777
10655 37010 74321 105932 150459 170020 186023 194210
13511 50448 89875 120073 154292 172113 186554 195442
14509 51664 91147 133537 155414 174998 189225 197533
17529 52224 93899 143617 156541 178778 189892 199804

Q1. What was the number of the ticket which won first prize?

Q2. What was the value of first prize?

Q3. 'Just Wishing' syndicate won first prize. What is a syndicate?

Q4. What do the letters 'NFP' after the 'Just Wishing' syndicate mean?

- Q5. (a) Who won second prize?
(b) What do you think the winners of the second prize plan to do with the money they won?
- Q6. Sarah Jones won third prize. What is Sarah's address?
- Q7. Chantelle has ticket number 72040. What prize did she win?
- Q8. How much did each of these people win?
(a) Alan, ticket 172113
(b) Cindy, ticket 34602
(c) Ali, ticket 170200
- Q9. There were 200 000 tickets sold in the special charity lottery. Matt bought 1 ticket. What was the probability Matt will win first prize?
- Q10. How many prizes were there in this lottery?
- Q11. (a) How many 'losing tickets' were there in this lottery?
(b) What percentage of tickets sold in this lottery did not win a prize?
- Q12. (a) Each ticket in the lottery cost \$5. Find the total value of the tickets sold.
(b) Calculate the total value of the prize money.
(c) What percentage of the value of the ticket sales was returned in prize money?



ANSWERS

Q1. 34603

Q2. \$250 000

Q3. Group of people who share payment of ticket and possible winnings

Q4. Not for publication

Q5.(a) K.Ross

(b) New house

Q6. The Kingsway, Cronulla

Q7. \$500

Q8.(a) \$100

(b) \$1000

(c) Nil

Q9. $\frac{1}{200000}$

Q10.(a) \$1 million

(b) \$320600

(c) 32%