## Why Did the King's Birthday Celebration Last So Long?

Do each exercise and find your answer in the Code Key. Notice the letter under it. Write this letter in the box containing the exercise number.


| Code Key | $\frac{1}{100}$ | $\frac{1}{5}$ | $\frac{2}{5}$ | $\frac{3}{5}$ | $\frac{4}{5}$ | 1 | $\frac{4}{13}$ | $\frac{5}{13}$ | $\frac{2}{7}$ | $\frac{1}{8}$ | $\frac{3}{8}$ | $\frac{1}{2}$ | $\frac{5}{8}$ | $\frac{7}{8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R | T | S | N | 1 | K | P | E | W | Y | H | A | L | G |

I. Find each probability if you spin the spinner once.
(1) $P($ red $)$
(2) P (green)
(3) $P$ (blue or white)
(4) $P$ (not yellow)
(5) $P($ not red $)$
(6) P (blue or red or yellow)
II. Find each probability if you choose one card at random.

(7) $P$ (striped)
(8) P (white)
(9) P (shaded)
(10) P (white or shaded)
(11) $P$ (striped or white)
(12) $P$ (striped or shaded)
(13) $P$ (not striped)
(14) $P$ (not white)
(15) $P$ (striped or white or shaded)
III. Solve.
(16) What is the probability of guessing the correct answer to a multiple choice question if there are 5 choices?
(18) What is the probability that your birthday will fall on Saturday or Sunday?
(20) A class of 25 students has 15 girls and 10 boys. If one student is chosen at random, what is the probability it is a girl?
(17) What is the probability of guessing the correct answer to a true-false question?
(19) What is the probability of winning a raffle if 500 tickets are sold and you buy 5 of them?
(21) There are 26 letters in the alphabet. What is the probability that a letter chosen at random is in the word MATHEMATICS?

| 5 | 1 | 18 | 8 | 3 | 14 | 6 | 17 | 13 | 10 | 15 | 20 | 4 | 11 | 7 | 16 | 21 | 12 | 19 | 2 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

