Compound ProbabilityIndependent Events

## What Do the Police Put On a Bad Pig?

Cross out the box containing each correct answer. (If an answer appears more than once, it doesn't matter which one you cross out.) When you finish, write the letters from the remaining boxes in the spaces at the bottom of the page.

1. Find each probability if you spin both spinners.
(1) $\mathrm{P}($ white,$A)$
(2) $P($ white,$B)$
(3) $P($ striped, $A)$
(4) $P($ striped,$B)$
(5) $P($ not striped, $A)$
(6) $P($ not striped,$B)$
(7) $P($ not white, $A)$
(8) $P($ not white, $B)$

II. Find each probability if you spin the spinner and roll the number cube.
(9) $P$ (blue , 2)
(10) $P$ (blue, not 2)
(11) $P$ (yellow, even)
(12) $P($ red, even)
(13) $P($ not blue, 5)
(14) $P($ not blue, odd)
(15) $P($ red, 4$)$
(16) $P($ red, not 4)

III. Find each probability if you pick one marble, replace it, then pick a second marble.
(17) $P$ (black, white)
(18) $P$ (black, striped)
(19) $P$ (white, striped)
(20) $P($ not white, striped)
(21) $P$ (black, black)
(22) $P($ striped, striped $)$
(23) $P$ (white, not white)
(24) $P$ (not white, not white)
IV. Solve.
(25) A test has two multiple choice questions, each with five choices. What is the probability of guessing the correct answer to both questions?
(26) One letter is randomly selected from the word MATH, and a second letter is randomly selected from the word JOKES. What is the probability that both letters are vowels?

| A | T | T | N | O | H | E | E | A | T | P | P | I | M | G | C | O |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{1}{3}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{5}$ | $\frac{1}{6}$ | $\frac{1}{7}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{9}$ | $\frac{1}{10}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{15}$ | $\frac{1}{16}$ | $\frac{1}{18}$ | $\frac{1}{20}$ | $\frac{1}{24}$ |
| T | H | O | U | G | S | S | L | F | A | E | E | F | A | T | S | E |
| $\frac{1}{25}$ | $\frac{1}{36}$ | $\frac{2}{5}$ | $\frac{2}{7}$ | $\frac{2}{9}$ | $\frac{2}{15}$ | $\frac{2}{15}$ | $\frac{3}{8}$ | $\frac{3}{10}$ | $\frac{4}{9}$ | $\frac{4}{15}$ | $\frac{4}{15}$ | $\frac{5}{8}$ | $\frac{5}{12}$ | $\frac{5}{24}$ | $\frac{7}{15}$ | $\frac{8}{15}$ |

