

Place **ANSWERS ONLY** in the boxes.

(Problems 1 through 13) Round your answers to 2 decimal places if necessary, then match the letter(s) of the correct answer on the right with the question on the left. ANSWER IN **CAPITAL LETTERS!** Answers may be used more than once.

- |                          |                                                                                                                                                                                      |         |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| <input type="checkbox"/> | 1) If a coin is flipped twice, three things could happen; Two heads are observed, Two tails are observed, or one of each is observed. Are these three equally likely?                | A) Yes  |
| <input type="checkbox"/> | 2) If three coins are flipped, what is the probability that all are heads or all are tails?                                                                                          | B) No   |
| <input type="checkbox"/> | 3) If we randomly pull one marble out of a bag, the probability that it is red is .55. The probability that it is blue is .25. Find the probability that it is neither red nor blue. | C) 0    |
| <input type="checkbox"/> | 4) A bag contains three colors of chips; black, white, and gold. If we reach in and randomly pick one chip out, find the probability that it is black or gold.                       | D) .05  |
| <input type="checkbox"/> | 5) A bag contains three colors of chips; black, white, and gold. If we reach in and randomly pick one chip out, find the probability that it is black and gold.                      | E) .10  |
| <input type="checkbox"/> | 6) A bag contains three colors of chips; black, white, and gold. If we reach in and randomly pick one chip, find the probability that it is black, white, or gold.                   | F) .11  |
| <input type="checkbox"/> | 7) A bag contains an equal amount of black, white, and gold chips. If we reach in and randomly pick one chip out, find the probability that it is black or gold.                     | H) .20  |
|                          |                                                                                                                                                                                      | K) .25  |
|                          |                                                                                                                                                                                      | M) .30  |
|                          |                                                                                                                                                                                      | N) .33  |
|                          |                                                                                                                                                                                      | P) .35  |
|                          |                                                                                                                                                                                      | R) .40  |
|                          |                                                                                                                                                                                      | T) .45  |
|                          |                                                                                                                                                                                      | V) .50  |
|                          |                                                                                                                                                                                      | W) .55  |
|                          |                                                                                                                                                                                      | X) .60  |
|                          |                                                                                                                                                                                      | Z) .65  |
|                          |                                                                                                                                                                                      | AA) .67 |

Use the following for problems 8-10

36 people attended a luncheon. 18 had broccoli, 15 had eggplant, and 5 didn't have either.

- |                          |                                                                                                                                                                                                                                  |                           |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <input type="checkbox"/> | 8) Find the probability that a person selected at random had broccoli.                                                                                                                                                           | BB) .70                   |
| <input type="checkbox"/> | 9) Find the probability that a person selected at random had broccoli and eggplant.                                                                                                                                              | CC) .75                   |
| <input type="checkbox"/> | 10) Find the probability that a person selected at random had broccoli, but not eggplant.                                                                                                                                        | DD) .80                   |
| <input type="checkbox"/> | 11) The probability that a Martian owns a spaceship is .75. The probability that a Martian owns a death ray is .55. The probability that a Martian owns both is .35. Find the probability that a Martian doesn't own either one. | EE) .85                   |
| <input type="checkbox"/> | 12) If the probability of winning a game is $\frac{4}{5}$ , then find the odds of winning.                                                                                                                                       | FF) .90                   |
| <input type="checkbox"/> | 13) If the odds of winning a game are 2 to 3, then find the probability of <b>LOSING</b> .<br>(Assume no ties)                                                                                                                   | HH) .95                   |
|                          |                                                                                                                                                                                                                                  | KK) 1.00                  |
|                          |                                                                                                                                                                                                                                  | MM) Need More Information |
|                          |                                                                                                                                                                                                                                  | NN) 1 : 4                 |
|                          |                                                                                                                                                                                                                                  | PP) 4 : 1                 |
|                          |                                                                                                                                                                                                                                  | RR) 4 : 5                 |
|                          |                                                                                                                                                                                                                                  | TT) 5 : 4                 |
|                          |                                                                                                                                                                                                                                  | VV) 4 : 9                 |
|                          |                                                                                                                                                                                                                                  | WW) 9 : 4                 |
|                          |                                                                                                                                                                                                                                  | XX) None of these         |

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Use the following for problems 14-15

If 2% of homes have no TV, 26% have 1 TV, 45% have 2, 18% have three, and the rest have 4 or more, then....

14) What percentage of homes have at least 2 TV's?

15) What percentage of homes have less than 3 TV's?