

PUZZLEBOMB

SOLUTIONS

#CHERYLSSWEETS

#CHERYLSSWEETS: by @christianp.

There are 100 sweets in the bag, and 4 of them are red. Hannah arrived on bus number 825.

Here is the table of possible solutions:

If there are n sweets, r of which are red, the probability of drawing two red sweets is $(n \times r) / ((n-1) \times (r-1))$.

Greyed out squares indicate that the value of n given by this equation would not result in a probability of the form $1/k$, where k is a bus number, for that number of red sweets.

Albert's first statement means there can't be 10 or 11 red sweets, as then Bernard might know; then, since there must be 4 or 15 sweets, and thus Bernard knows which, it must be the third equation, and $n = 100$.

No. of red sweets in the bag

4 10 11 15

$$n^2 - n - 3080 = 0$$

$n = 56$

$$n^2 - n - 7140 = 0$$

$n = 85$

$$n^2 - n - 9900 = 0$$

$n = 100$

$$n^2 - n - 1260 = 0$$

$n = 36$

$$n^2 - n - 2070 = 0$$

$n = 46$

$$n^2 - n - 2970 = 0$$

$n = 55$

APIS CLUES

These words are all legal, but unplayable, in Scrabble.

APIS CLUES: devised by @apisclues.

1. Brief nap after Italian food - that's glamour - PIZZAZZ
2. Mock GNVQ, perhaps - it's being declared unsuitable - DISQUALIFICATION
3. Basketball player perhaps has skill, but it's a worthless little thing - KNICKKNACK
4. Beginning to show alopecia? It's not to be emphasised - STRESSLESSNESS
5. Pulp record could be number one again? - RAZZMATAZZ