Sept 2021 BRAIN TEASER & SOLUTION

Old Friends Kids' Ages

THE SEPTEMBER 2021 BRAIN TEASER

Two old high school friends John and Bob unexpectedly meet after many years. They go to a nearby outdoor chess cafe to share their life stories and play some chess. Both are now married with kids. John states he has two kids ages 10 and 12. Bob responds that he has three kids, whose ages when multiplied equal 72, and when added equal the last two digits of the license plate on the nearest parked car. John sees the license plate and seems somewhat puzzled, stating that he is missing information. Bob apologizes stating: "oh but of course, you are correct, I am so sorry. Remember our endless chess marathons, well I forgot to tell you my oldest is becoming a formidable chess player for his age". John says, "yes of course, knowing his father, could not be any other way," quickly and correctly provides the three ages of Bob's kids. What are the three ages of Bob's kids?

Note: to preclude confusion, consider the ages rounded up or down to the nearest full year for normal-term pregnancies.

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The answer to the "Old Friends Kids' Ages"

This teaser is an exercise of mining for scarce, critical information, while discarding unuseful information. The table to the right is the orderly structuring of Bob's three kids whole number ages that multiplied equal 72. John advised that he did not have enough information when looking at the license plate. Since all the answers are unique except the two highlighted in red, it must be one of these. The final piece of info is when Bob states he has an older child, clinching ages 3, 3 and 8.

Kids Ages	Product	Sum
1x1x72	72	74
1x2x36	72	39
1x3x24	72	28
1x4x18	72	23
1x6x12	72	19
1x8x9	72	18
2x2x18	72	22
2x3x12	72	17
2x6x6	72	14
3x3x8	72	14
3x4x6	72	13

The final note intends to make clear that cases with twins are rounded to the same age, i.e., equal age meaning no single older child. Also that early term pregnancies are precluded, intending to mean that different pregnancies cannot round to the same age.