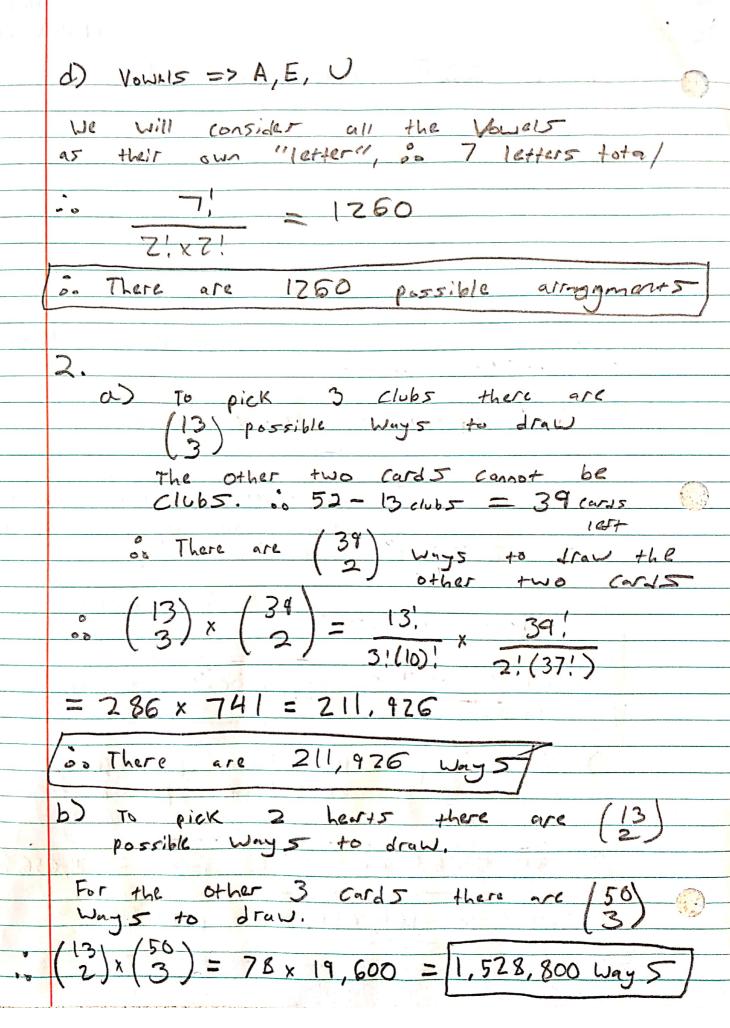
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(13) possible ways to trav and to possible ways to draw, (2) $(3) \times (13) = 286 \times 78 = 22,368$ is There are 22,308 possible ways 3. n = 12 K = 5 $(12) \cdot (12) = /792/$ b) $(12)(-4)^{7}(3)^{5} = 792 \times (-4)^{7}(3)^{5}$ = $\begin{bmatrix} -3, 153, 199, 104 \end{bmatrix}$ () $(12)(12)^{7}(-2)^{5} = 792(12)^{7}(-2)^{5}$ = -9.08....×10 m a) & Using combinations with repititon (4+16-1) = (19) = 969: 969 possible way 5

5. The minimum Ali can run 15 35 (5weeks x 7days) times during the 5 week period. If All runs her max of 50 once a day, there are only 50-35, or 15 runs which she can distribute over the 35 days. 35 distinct numbers 50+ d1+19, d2+19, d3, +19 = 699 35 distinct numbers so For more of the ditial trambers to exist as one of the d; numbers we would need 70 distinct numbers in total. of An element of Setz must exist in set, of consectuive days where

Ali runs 19 times