

Workout

Question 1: TT, TH, HT, HH

Question 2: 1H, 1T, 2H, 2T, 3H, 3T, 4H, 4T, 5H, 5T, 6H, 6T

Question 3: WW, WD, WL, DW, DD, DL, LW, LD, LL

Question 4: Alison&Beth, Alison&Conor, Alison&David, Alison&Eddie, Beth&Conor, Beth&David, Beth&Eddie, Conor&David, Conor&Eddie, David&Eddie.

Question 5

(a) 72, 76, 74, 27, 26, 24, 67, 62, 64, 47, 42, 46

(b) 726, 724, 762, 764, 742, 746, 276, 274, 267, 264, 247, 246, 672, 674, 627, 624, 647, 642, 472, 476, 427, 426, 467, 462

Question 6: SCI, SCD, SPI, SPD, SBI, SBD, FCI, FCD, FPI, FPD, FBI, FBD

Apply

Question 1: He has included the same combinations but in reverse. For example, Peas&Carrots and then Carrots&Peas. This is the same combination of topping for a pizza.

Question 2: 842, 894, 892, 824, 984, 982, 948, 942, 928, 924, 482, 428, 492, 498, 284, 248, 298, 294

Question 3:

(a) CP, CO, CM, CB, PO, PM, PB, OM, OB, MB

(b) 7/10

Question 4:

Options: RB, RY, RW, RR, PB, PY, PW, PP

Probability: $\frac{2}{8}$ or $\frac{1}{4}$

Question 5:

(a) 2&4, 2&2, 2&3, 2&1, 4&4, 4&2, 4&3, 4&1, 5&4, 5&2, **5&3, 5&1**

(b) Probability of an odd answer to the multiplication is $\frac{1}{6}$ (or $\frac{2}{12}$)

So if 300 games are played, there would be 50 winners.

$300 \times 80p = \text{£}240$ and $50 \times \text{£}2 = \text{£}100$

Therefore **£140 should** be raised

Question 6: Ali cannot afford:

Soup&Beef, Prawns&Beef, Prawns&Pork, Melon&Beef, Duck&Chicken,
Duck&Beef, Duck&Pork, Beef&Trifle, Beef&Brownie, Beef&Eton Mess, Pork&Eton
Mess.