



5. All six digits of three 2-digit numbers are different. What is the largest possible sum of three such numbers?
- A 237 B 246 C 255 D 264 E 273

1275



©UKMT

-
5. C Let the required addition be ' ab ' + ' cd ' + ' ef ', where a, b, c, d, e, f are single, distinct digits. To make this sum as large as possible, we need a, c, e (the tens digits) as large as possible; so they must be 7, 8, 9 in some order. Then we need b, d, f as large as possible, so 4, 5, 6 in some order. Hence the largest sum is $10(7 + 8 + 9) + (4 + 5 + 6) = 10 \times 24 + 15 = 255$.