



Round the Three Dice



There are three dice, each of them with faces labelled from 1 to 6. When the dice are rolled they can be combined in six different ways to make a three-digit number.

For example, if I roll a 2 and a 4 and a 5, I can combine them to make 245, 254, 425, 452, 524 or 542.

Now round each of these numbers to the nearest 100:
245 rounds to 200, 254 rounds to 300, 425 rounds to 400, 452 rounds to 500, 524 rounds to 500 and 542 rounds to 500.

Repeat for other rolls of the dice.

Can each of the six numbers round to the same multiple of 100?
Can each of the six numbers round to a different multiple of 100?