Two-digit target

You have a set of the digits from 0 - 9.

0	1	2	3	4	5	6	7	8	9

Can you arrange these digits in the five boxes below to make two-digit numbers as close to the targets as possible? You may use each digit once only.

largest even number

largest odd number

smallest odd number

largest multiple of 5

number closest to 50

How will you know that your solution is as close to the targets as possible?

How to get started:

Write out the number 0 to 9 on different pieces of paper. Use this to help you arrange the numbers to reach the different targets.
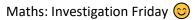
Which target are you going to start with? Does this affect the rest of the targets?

Remember:

Odd numbers end in: 1, 3, 5, 7, 9

Even numbers end in: 0, 2, 4, 6, 8

A multiple 5 ends in 5 or 0 e.g. 15 or 30.

Answers:

This is an open-ended problem so there are lots of solutions. Here are some examples for ways you could organise the numbers. The ones that are highlighted are just showing where the people started when working with this problem.

	Brooke	Ryder
LARGEST EVEN	**98**	**98**
largest odd	75	67
smallest odd	13	01
largest multiple of 5	60	35
nearest to 50	42	42

	Brady
largest even	86
LARGEST ODD	**97**
smallest odd	01
largest multiple of 5	45
nearest to 50	32

	Roberto	Nico	Georgia	Brady	Ryder
largest even	86	86	82	86	98
largest odd	73	27	73	97	67
SMALLEST ODD	**01**	**01**	**01**	**01**	**01**
largest multiple of 5	25	35	65	45	35
nearest to 50	49	49	49	32	42

	Bryan
largest even	96
largest odd	75
smallest odd	13
largest multiple of 5	**80**
nearest to 50	42

	Roberto	Nico	Georgia	Amelia
largest even	86	86	82	94
largest odd	73	27	73	87
smallest odd	01	01	01	23
largest multiple of 5	25	35	65	60
nearest to 50	**49**	**49**	**49**	**51**