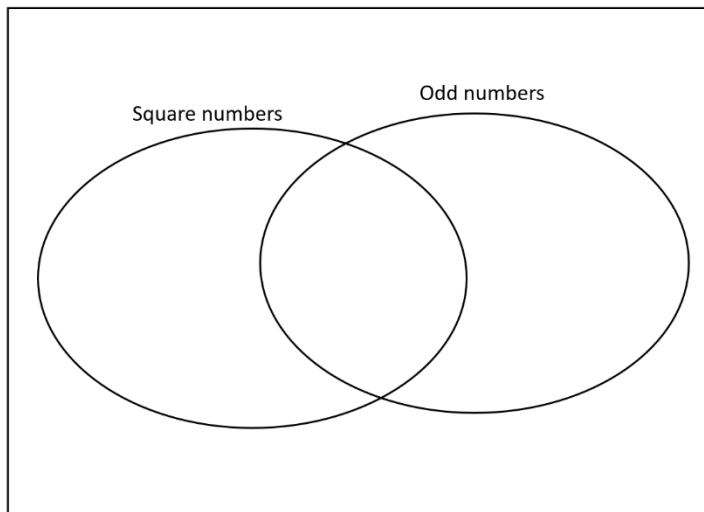


**Problem of the Week: Week 6(Sum2) : Year 7: Factors, multiples and indices**

- Use the concepts and vocabulary of prime numbers, factors (divisors), multiples, common factors, common multiples, highest common factor and lowest common multiple
- Use integer powers and associated real roots (square, cube and higher), recognise powers of 2,3,4,5

**Various Venns**

Place the numbers from 0 to 51 in this diagram

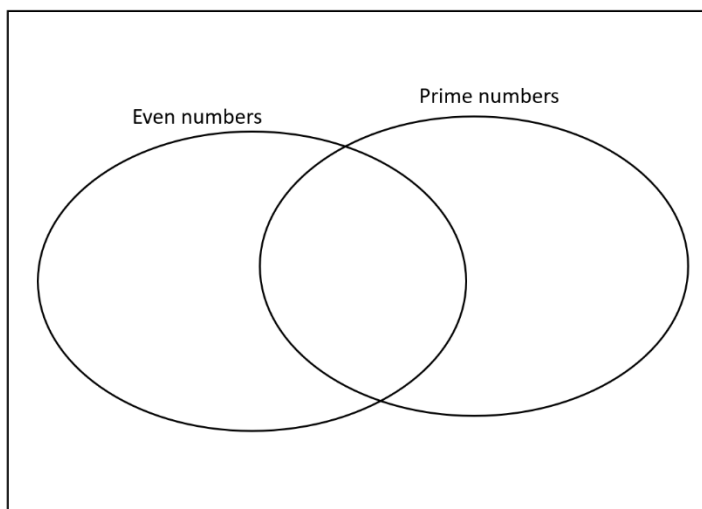


0	1	2	3
4	5	6	7
8	9	10	11
12	13	14	15
16	17	18	19
20	21	22	23
24	25	26	27
28	29	30	31
32	33	34	35
36	37	38	39
40	41	42	43
44	45	46	47
48	49	50	51

<https://nrich.maths.org/5721>

**Various Venns**

Place the numbers from 0 to 51 in this diagram



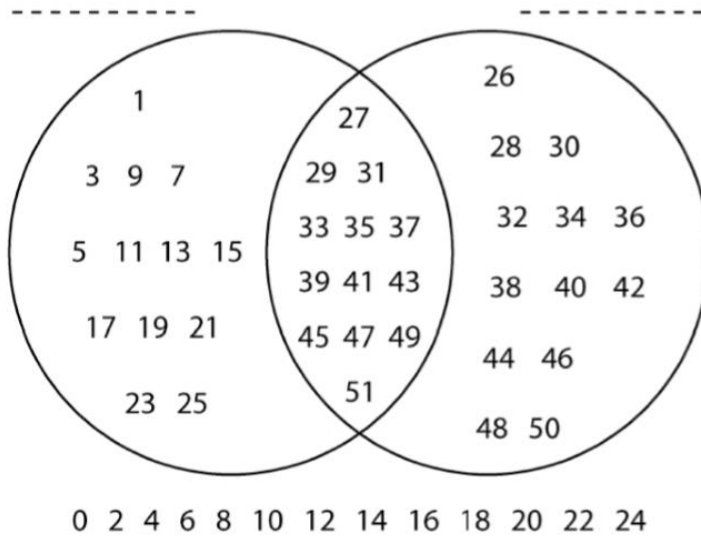
0	1	2	3
4	5	6	7
8	9	10	11
12	13	14	15
16	17	18	19
20	21	22	23
24	25	26	27
28	29	30	31
32	33	34	35
36	37	38	39
40	41	42	43
44	45	46	47
48	49	50	51

<https://nrich.maths.org/5721>



### Various Venns 3

Choose the right words from the list at the side to write on the dashed lines



- Prime numbers
- Square numbers
- Triangular numbers
- Rectangular numbers
- Odd
- Even
- Less than 10
- Less than 25
- Greater than 14
- Greater than 25
- Between 10 and 20
- Between 25 and 35

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#### Challenge: Make a Million

Find two numbers, neither of which has a zero digit, whose product is 1,000,000

Try:

Factor	Factor	Product (factor x factor)	1,000,000 ?
7	43	301	No
918	414	380,052	No
999	999	999,801	No