Year 5 Term 2

Multiplying and dividing by 10, 100 and 1000

M	HTh	TTh	Th	100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
					1	3	6		
				1	3	6			
		1	3	6	0	0			
					2	4	7		
						2	4	7	
						0	2	4	7

Each digit is ten times greater.

Each digit is ten times smaller.

millions, digit, round, multiple, positive, negative

13.6 x 10
move digits 1 column left

13.6 x 1000
move digits 3 columns left

24.7 ÷ 10
move digits 1 column right

24.7 ÷ 100
move digits 2 columns right

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	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

A prime number has exactly 2 factors:
2, 3, 5, 7, 11, 13, 17, 19...

A composite number has more than 2 factors: 4, 6, 8, 9, 10, 12...

If I know... then I also know... because...

Factors of 15 = {1, 3, 5, 15}
Factors of 21 = {1, 3, 7, 21}
1 and 3 are common factors of 15 and 21

Multiples of 3 are 3, 6, 9, 12
Multiples of 4 are 4, 8, 12, 16
12 is a common multiple of 3 and 4

$1^2 = 1 \times 1 = 1$
$2^2 = 2 \times 2 = 4$
$3^2 = 3 \times 3 = 9$

A square number is the result of multiplying a number by itself.

$1^3 = 1 \times 1 \times 1 = 1$
$2^3 = 2 \times 2 \times 2 = 8$
$3^3 = 3 \times 3 \times 3 = 27$

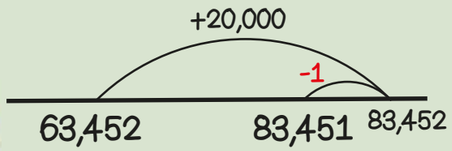
A cube number is the result of multiplying a whole number by itself, then by itself again.

prime, common, factor, multiple, multiplier, divisor

63,452 + 19,999
Round then adjust

10,000s	1000s	100s	10s	1s
10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000	1000 1000 1000	100 100 100 100	10 10 10 10 10	1 1

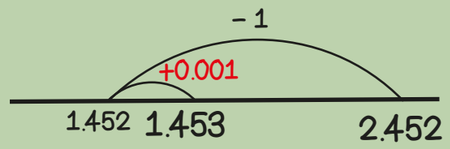
Add 20,000 then subtract 1



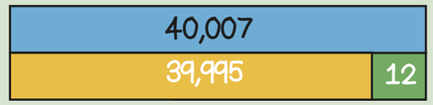
2.452 – 0.999
Round then adjust

1s	$\frac{1}{10}$s	$\frac{1}{100}$s	$\frac{1}{1000}$s
1 1	0.1 0.1 0.1 0.1	0.01 0.01 0.01 0.01 0.01	0.001 0.001 0.001

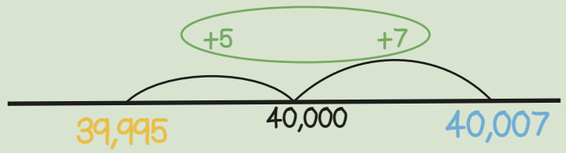
Take away 1 then add 1 thousandth



40,007 – 39,995
Find the difference between two numbers



Count on 5 from 39,995 to 40,000, then 7 more so the difference between them is 12



sum, total, subtract, difference

Written methods

$$\begin{array}{r} 25{,}648 \\ +\ 42{,}524 \\ \hline 68{,}172 \\ {\scriptstyle 1\quad 1} \end{array}$$

$$\begin{array}{r} {\scriptstyle 3\ 1\ 6\ 1} \\ 4\!\!\not{5}{,}\!7\!\not{4}8 \\ -\ 26{,}374 \\ \hline 19{,}374 \end{array}$$

$$\begin{array}{r} 25.648 \\ +\ 42.524 \\ \hline 68.172 \\ {\scriptstyle 1\quad 1} \end{array}$$

$$\begin{array}{r} {\scriptstyle 3\ 1\ 6\ 1} \\ 4\!\!\not{5}.\!7\!\not{4}8 \\ -\ 26.374 \\ \hline 19.374 \end{array}$$