Y2- Addition and Subtraction

partitioning

43
40 + 3
30 + 13
20 + 23
10 + 33

related facts to 100

If I know that 3 + 4 is equal to 7, I also know that 30 + 40 is equal to 70

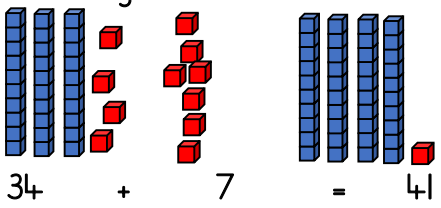
commutativity

Addition can be done in any order

3 + 4 = 4 + 3

Subtraction **cannot** be done in any order

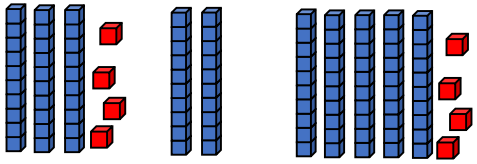
two-digit number and ones



34 + 7 = 41

inverse: 41 – 7 = 34

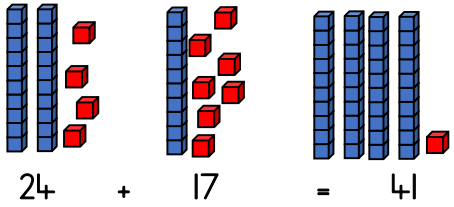
two-digit number and tens



34 + 20 = 54

inverse: 54 – 20 = 34

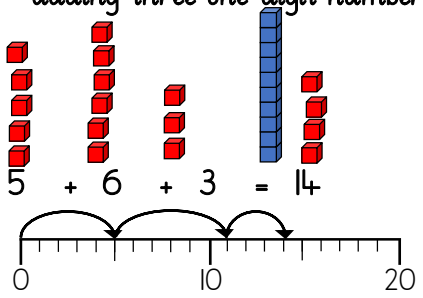
two two-digit number



24 + 17 = 41

inverse: 41 – 17 = 24

adding three one-digit numbers



inverse and related facts

3 + 4 = 7	30 + 40 = 70	300 + 400 = 700
4 + 3 = 7	40 + 30 = 70	400 + 300 = 700
7 – 3 = 4	70 – 30 = 40	700 – 300 = 400
7 – 4 = 3	70 – 40 = 30	700 – 400 = 300

number bonds within 20

2	3
0 + 2 1 + 1	0 + 3 1 + 2
4	**5**
0 + 4 1 + 3 2 + 2	0 + 5 1 + 4 2 + 3
6	**7**
0 + 6 1 + 5 2 + 4 3 + 3	0 + 7 1 + 6 2 + 5 3 + 4
8	**9**
0 + 8 1 + 7 2 + 6 3 + 5 4 + 4	0 + 9 1 + 8 2 + 7 3 + 6 4 + 5
10	**11**
0 + 10 1 + 9 2 + 8 3 + 7 4 + 6 5 + 5	0 + 11 1 + 10 2 + 9 3 + 8 4 + 7 5 + 6

12	13	14
0 + 12 1 + 11 2 + 10 3 + 9 4 + 8 5 + 7 6 + 6	0 + 13 1 + 12 2 + 11 3 + 10 4 + 9 5 + 8 6 + 7	0 + 14 1 + 13 2 + 12 3 + 11 4 + 10 5 + 9 6 + 8 7 + 7
15	**16**	**17**
0 + 15 1 + 14 2 + 13 3 + 12 4 + 11 5 + 10 6 + 9 7 + 8	0 + 16 1 + 15 2 + 14 3 + 13 4 + 12 5 + 11 6 + 10 7 + 9	0 + 17 1 + 16 2 + 15 3 + 14 4 + 13 5 + 12 6 + 11 7 + 10 8 + 9
18	**19**	**20**
0 + 18 1 + 17 2 + 16 3 + 15 4 + 14 5 + 13 6 + 12 7 + 11 8 + 10 9 + 9	0 + 19 1 + 18 2 + 17 3 + 16 4 + 15 5 + 14 6 + 13 7 + 12 8 + 11 9 + 10	0 + 20 1 + 19 2 + 18 3 + 17 4 + 16 5 + 15 6 + 14 7 + 13 8 + 12 9 + 11 10 + 10

Y2- Multiplication and Division

Multiples of 2: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

Multiples of 3: 3. 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36

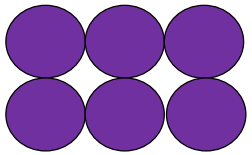
Multiples of 5: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60

Multiples of 10: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

Multiplication facts for the 2, 5 and 10 times tables

1 x 2 = 2	1 x 5 = 5	1 x 10 = 10
2 x 2 = 4	2 x 5 = 10	2 x 10 = 22
3 x 2 = 6	3 x 5 = 15	3 x 10 = 30
4 x 2 = 8	4 x 5 = 20	4 x 10 = 40
5 x 2 = 10	5 x 5 = 25	5 x 10 = 50
6 x 2 = 12	6 x 5 = 30	6 x 10 = 60
7 x 2 = 14	7 x 5 = 35	7 x 10 = 70
8 x 2 = 16	8 x 5 = 40	8 x 10 = 80
9 x 2 = 18	9 x 5 = 45	9 x 10 = 90
10 x 2 = 20	10 x 5 = 50	10 x 10 = 100
11 x 2 = 22	11 x 5 = 55	11 x 10 = 110
12 x 2 = 24	12 x 5 = 60	12 x 10 = 120

Using a times table fact



3 is half of 6
6 is double 3

30 is half of 60
60 is double 30

3 x 2 = 6
2 x 3 = 6
6 ÷ 3 = 2
6 ÷ 2 = 3

30 x 2 = 60
20 x 3 = 60
60 ÷ 3 = 20
60 ÷ 2 = 30

$\frac{1}{2}$ of 6 = 3

$\frac{1}{2}$ of 60 = 30

odd numbers	even numbers
Odd numbers are not divisible by 2. The ones digit in an odd number is 1, 3, 5, 7 or 9 Example: 31 45 69	Even numbers are divisible by 2. The ones digit in an even number is 0, 2, 4, 6 or 8 Example: 32 16 48