Multiplication and Division

Maths

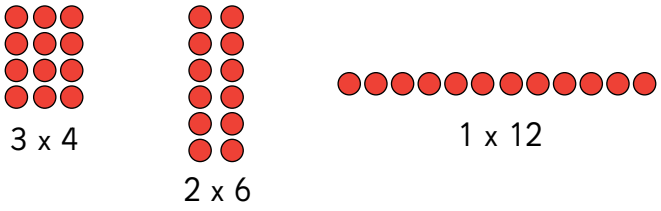
Y4

Key Vocabulary

X ÷ multiply divide factors factor pairs product place holders partitioning efficient

Factors

Factors are the numbers multiplied together to get a given number. 1,2,3,4,6 and 12 are all factors of 12.



Multiply by 10 and 100

Th	H	T	O
		3	5
	3	5	0
3	5	0	0

35 x 10 = 350

35 x 100 = 3,500

x10 move digits **1** place to the **left**

x100 move digits **2** places to the **left**

Divide by 10 and 100

Th	H	T	O
		7	0
			7
	7	0	0
			7

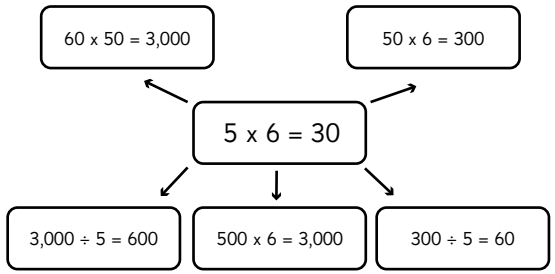
70 ÷ 10 = 7

700 ÷ 100 = 7

÷ 10 move digits 1 place to the **right**

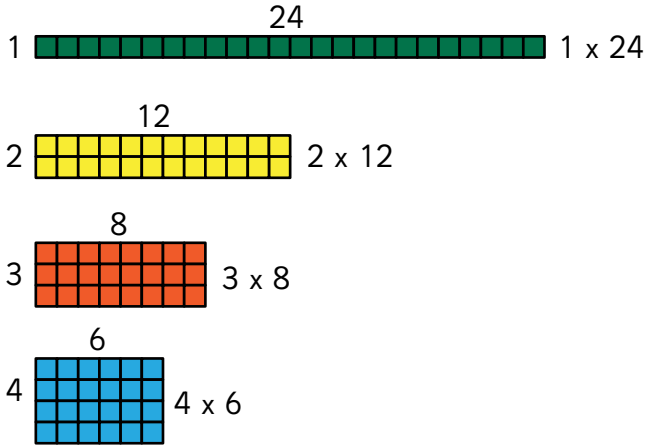
÷ 100 move digits 2 place to the **right**

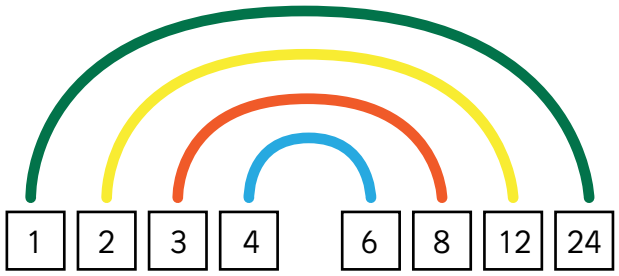
Related Facts



Factor pairs

Factor pairs of 24 = numbers that multiply together to make 24





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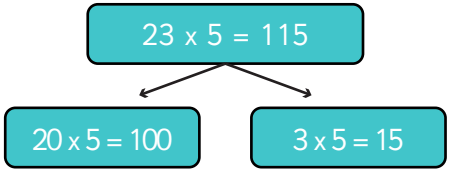
Efficient multiplication

264 x 3 = 792
200 x 3 = 600
60 x 3 = 180
4 x 3 = 12



Use apparatus

264 x 3 = 792

x	200	60	4
3	100 100 100 100 100 100	10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	1 1 1 1 1 1 1 1 1 1 1 1

Multiply 2 and 3 digits by 1 digit – written method

1. Multiply the ones x ones (5 x 3 = 15 ones)
2. Exchange the one then into the tens column
3. Multiply the ones x tens (3 x 2 (tens) = 6 tens)
4. Add the exchanged 10 (6 + 1 = 7 tens)
5. Multiply the ones x hundreds (3 x 3 (hundreds) = 9 hundreds)

Hundreds	Tens	Ones
100 100 100	10 10	1 1 1 1 1
100 100 100	10 10	1 1 1 1 1
100 100 100	10 10	1 1 1 1 1

10

	H	T	O	
	3	2	5	
x			3	
	9	7	5	
		1		

Divide 2 and 3 digits by 1 digit – sharing into equal groups

484 ÷ 4 = 121

Hundreds	Tens	Ones
100	10 10	1
100	10 10	1
100	10 10	1
100	10 10	1