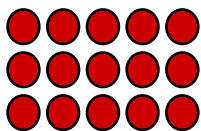
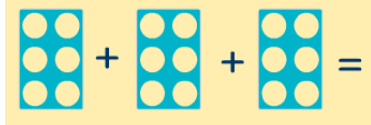


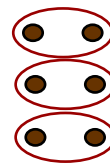
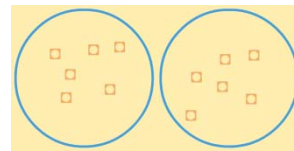
## Multiplication

Pictorial and practical



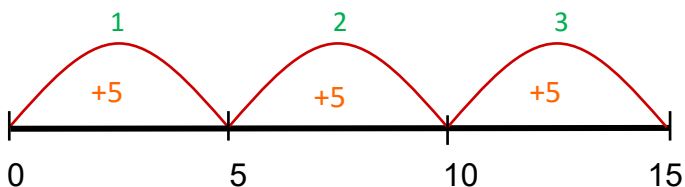
## Division

Pictorial and practical

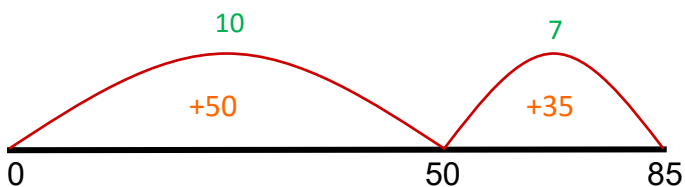


Number lines – repeated addition

$$3 \times 5 = 15$$

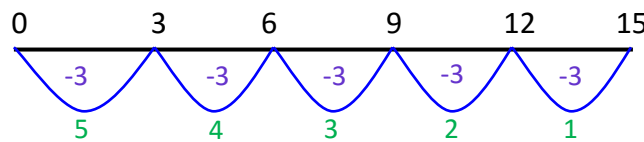


$$17 \times 5 = 85$$

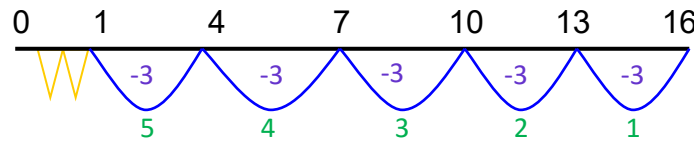


Number lines – repeated subtraction

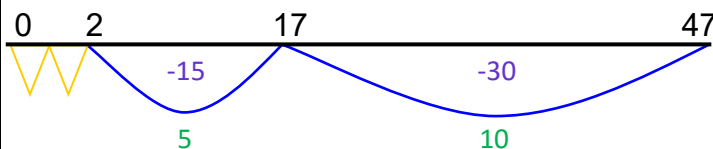
$$15 \div 3 = 5$$



$$16 \div 3 = 5 \text{ r } 1$$



$$47 \div 3 = 15 \text{ r } 2$$



## Grid Method

$$6 \times 14 = 84$$

$$23 \times 18 = 414$$

x	10	4		x	20	3
6	60	24		10	200	30
				8	160	24
	T	U				
	6	0		H	T	U
+	2	4		2	0	0
	8	4		1	6	0
					3	0
					2	4
				1		
				4	1	4

## Expanded method

$$72 \div 6 = 12$$

$$136 \div 6 = 22 \text{ r } 4$$

6	7	2		6	1	3	6	
	-6	0	(6 x 10)		-	6	0	(6 x 10)
	1	2				7	6	
	-1	2	(6 x 2)		-	6	0	(6 x 10)
			12			1	6	
					-	1	2	(6 x 2)
						4		22

## Short multiplication

$$27 \times 6 = 162$$

	H	T	U
x	2	7	6
			4
	1	6	2

## Short division

$$98 \div 7 = 14$$

$$432 \div 5 = 86 \text{ r } 2$$

	1	4				8	6	r2
		2					3	
7	9	8		5	4	3	2	

## Long multiplication

$$24 \times 16 = 384$$

	H	T	U
x	2	4	
		1	6
		2	4
	1	2	0
		4	0
	2	0	0
	3	8	4

## Long division

$$432 \div 15 = 28 \text{ r } 2$$

		2	8	r2
1	5	4	3	2
		3	0	0
		1	3	2
		1	2	0
		1	2	

