

### We use multiplication to solve division.

$12 \div 4$  asks us to work out how many groups of 4 are there in 12

To solve  $12 \div 4$  we need to ask the question  $4 \times \underline{\quad} = 12$

$4 \times 3 = 12$  so  $12 \div 4 = 3$  and  $12 \div 3 = 4$

If  $4 \times 3 = 12$  then  $40 \times 3 = 120$  and  $4 \times 30 = 120$

Then

$12 \div 3 = 4$  and  $120 \div 3 = 40$  and  $120 \div 4 = 30$

$12 \div 4 = 3$  and  $120 \div 4 = 30$  and  $120 \div 3 = 40$

| X  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 2  | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20  |
| 3  | 3  | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30  |
| 4  | 4  | 8  | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40  |
| 5  | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50  |
| 6  | 6  | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60  |
| 7  | 7  | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70  |
| 8  | 8  | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80  |
| 9  | 9  | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90  |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

$$1236 \div 6 = 606$$

$$1200/6 + 36/6$$

$$600 + 6$$

$$1830 \div 6 =$$

$$\underline{\quad}/6 + \underline{\quad}/6$$

$$\underline{\quad} + \underline{\quad}$$

$$1428 \div 7 =$$

$$\underline{\quad}/7 + \underline{\quad}/7$$

$$\underline{\quad} + \underline{\quad}$$

$$3555 \div 5 =$$

$$\underline{\quad}/5 + \underline{\quad}/5$$

$$\underline{\quad} + \underline{\quad}$$

$$2142 \div 7 =$$

$$\underline{\quad}/7 + \underline{\quad}/7$$

$$\underline{\quad} + \underline{\quad}$$

$$7 \times 8 = 56$$

$$56 \div 6 =$$

$$56 \div 7 =$$

$$60 \times 8 = 480$$

$$480 \div 60 =$$

$$480 \div 80 =$$

$$280 \div 7 =$$

$$210 \div 3 =$$

$$560 \div 7$$

$$490 \div 7 =$$

$$70 \times 60 = 4200$$

$$4200 \div 70 =$$

$$4200 \div 60 =$$

$$30 \times 80 = 2400$$

$$2400 \div 80 =$$

$$50 \times 70 = 3500$$

$$3500 \div 70 =$$

$$40 \times 70 = 2800$$

$$280 \div 40 =$$

### DISTRIBUTIVE LAW of MULTIPLICATION

$$12 \times 35$$

$$12 \text{ groups of } 35 = (10 \text{ groups of } 35) + (2 \text{ groups of } 35)$$

$$12 \times 35 =$$

$$(10 + 2) \times 35 = 10 \times 35 + 2 \times 35$$

$$= 350 + 70$$

$$= 420$$

We can use the distributive law for DIVISION

$$420 \div 4 =$$

$$400 + 20$$

We can split the 420 into multiples of 4

$$420 \div 4 = 105$$

$$400 \div 4 + 20 \div 4$$

$$100 + 5$$

/ is another symbol for division

$$400 \div 4 = 400/4$$