

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

$$432 \div 6 = 72$$

$$420/6 + 12/6$$

$$70 + 2$$

$$252 \div 4 =$$

$$/4 + \quad /4$$

$$328 \div 8 =$$

$$/8 + \quad /8$$

$$171 \div 3 =$$

$$/3 + \quad /3$$

Building Up of **Building Down** is similar to the strategy **Guess, Check and Adjust**

$$1236 \div 4 =$$

$$4 \times 300 = 1200$$

$$4 \times 310 = 1240$$

$$4 \times 309 = 1236 \text{ so } 1236 \div 4 = 309$$

$$7 \times 6 = 42$$

$$42 \div 6 =$$

$$42 \div 7 =$$

$$6 \times 8 = 48$$

$$48 \div 6 =$$

$$48 \div 8 =$$

$$28 \div 7 =$$

$$21 \div 3 =$$

$$56 \div 7$$

$$49 \div 7 =$$

$$7 \times 60 = 420$$

$$420 \div 7 =$$

$$420 \div 6 =$$

$$30 \times 8 = 240$$

$$240 \div 8 =$$

$$50 \times 7 = 350$$

$$350 \div 7 =$$

$$4 \times 70 = 280$$

$$280 \div 4 =$$

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

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

$$726 \div 6 =$$

$$/6 + \quad /6 + \quad /6$$

$$1324 \div 4 =$$

$$/4 + \quad /4 + \quad /4$$

$$1760 \div 8 =$$

$$/8 + \quad /8$$

Try Building Down

$$360 \div 5 =$$

$$70 \times 5 =$$

$$71 \times 5 =$$

$$72 \times 5 =$$

$$812 \div 4 =$$

$$200 \times 4 =$$

$$201 \times 4 =$$

$$202 \times 4 =$$

$$203 \times 4 =$$