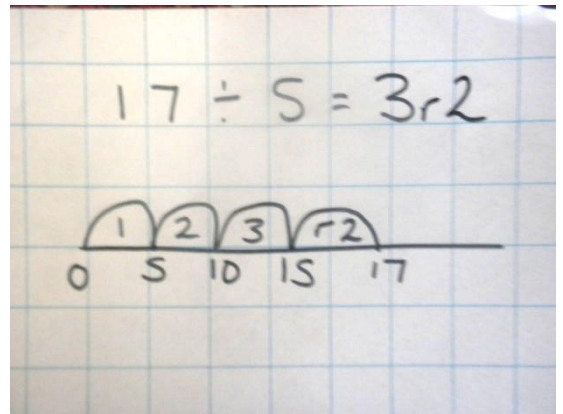
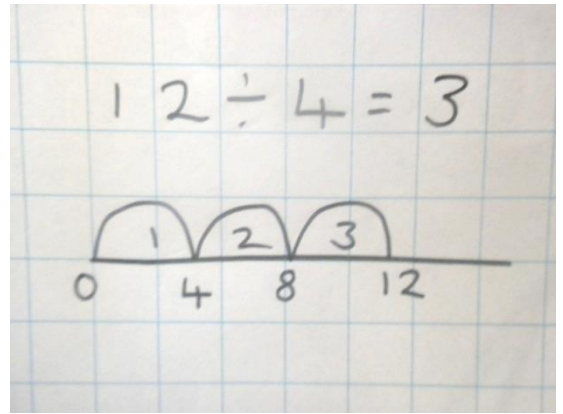


### Division on a numberline

- Draw a numberline
- Write zero at the start
- Jump in multiples of whatever you are dividing by until you land on the number you are dividing
- The answer is the number of jumps you make.
- If you find you can't make a complete jump you will have a remainder

**\*Usually taught in Year 2**



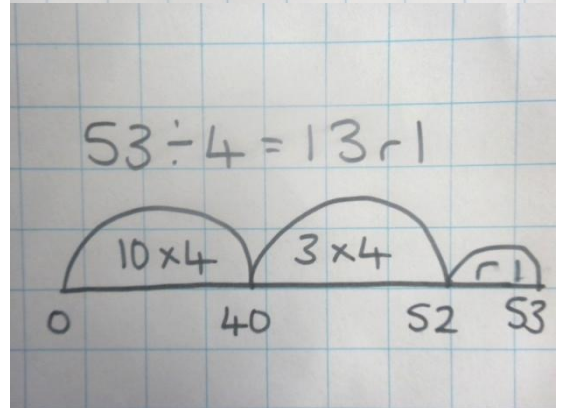
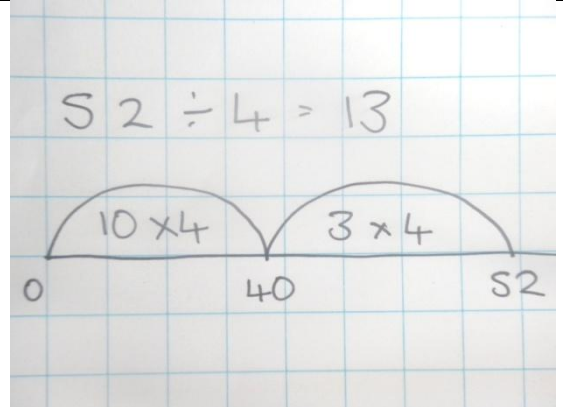
### Division on a numberline (with chunks)

- Draw a numberline
- Write zero at the start
- Jump in multiples of whatever you are dividing by until you land on the number you are dividing

NB: Use your multiplication facts to jump in larger chunks (e.g 10 jumps of 4 would allow you to land on 40, then 3 jumps of 4 gives you the extra 12 to get to 52)

- The answer is the number of jumps you make.
- If you find you can't make a complete jump you will have a remainder

**\*Usually taught in Year 2 and Year 3**



### Short Division

- Draw a 'bus stop'
- Write the number you are dividing inside the 'bus stop' and the number you are dividing by to the left of it
- Start at the tens column of the number in the 'bus stop' and divide 5 by 4 to get 1, which we write above the 5, and a remainder of 1 which is carried into the units column.
- Now divide 12 by 4 to get 3 and write it above the 2
- The number on the top is your answer
- If you can't divide the units number exactly then you will be left with a remainder (see  $53 \div 4$ )

**\*Usually taught in Year 4**

$$52 \div 4 = 13$$

$$53 \div 4 = 13 \text{ r}1$$

### Long Division

- Draw a 'bus stop'
- Write the number you are dividing inside the 'bus stop' and the number you are dividing by to the left of it
- Now work as you did on the numberline with chunks, however you will work vertically down the page subtracting each amount as you go until you reach either zero or a number less than the number you were dividing by (this would be a remainder)

**NB: you could also express the remainder as a fraction**

**(e.g  $27\text{r}4$  would become  $27 \frac{4}{5}$ ) since 4 is the**

**and 5 is the number you were dividing by.**

**\*Usually taught in Year 5**

$$135 \div 5 = 27$$

$$139 \div 5 = 27 \text{ r}4$$

Expressing the answer as a decimal (short division) - this an alternative method for completing the previous calculation

- If you have a remainder add the decimal point to the number in the bus stop and carry the remainder.
- In the examples this becomes  $40 \div 5 = 8$
- Put a decimal point in the answer above the one in the bus stop to give the answer 27.8

**\*Usually taught in Year 6**

Handwritten short division of 139 by 5 on grid paper. The calculation shows 139 divided by 5 equals 27 with a remainder of 4. To express the answer as a decimal, a decimal point is added to the dividend (139.0) and the remainder (4) is carried down to form 40. The final result is 27.8.

$$\begin{array}{r} 139 \div 5 \\ \hline 027 \cdot 8 \\ 5 \overline{) 139 \cdot 0} \end{array}$$