- **Division** is dividing a number into equal parts or sharing it equally.

- A division number sentence consists of:

  dividend   ÷   **divisor**   =   **quotient**

  24   ÷   3   =   8

  dividend   ÷   **divisor**   =   **quotient and remainder**

  25   ÷   3   =   3   R   1

- If the dividend is a **multiple** of the divisor, there will be no remainder.

  16 ÷ 2 = ____   21 ÷ 3 = ____   56 ÷ 8 = ____

- If the dividend is **not a multiple** of the divisor, there will be a remainder.
  We count back till we reach the closest multiple.
  <u>remainder = dividend - closest smaller multiple of the divisor</u>
  The remainder is always **less** than the divisor.

  remainder < divisor

  (17) ÷ 2 = <u>**8 R 1**</u>   (23) ÷ 3 = __R__

  (16) (1) 1 < 2 so R = 1   ( ) ( ) __< 3 so R =__

  16 ÷ 2 = **8**   _____

- If the dividend is **greater than the tenth multiple** of the divisor, we break down the number into two multiples of the divisor.

(48) ÷ 4 = **12**

(40) (8)

$40 ÷ 4 = 10$

$8 ÷ 4 = 2$

$10 + 2 = 12$

- We can solve the following using different number bonds.

(85) ÷ 5 = _____

(50) ( )

$50 ÷ 5 = 10$

___ ÷ 5 = ___

$10 +$ ___ = ___

(85) ÷ 5 = _____

(40) ( )

$40 ÷ 5 =$ _____

_____

_____

(85) ÷ 5 = _____

( ) ( )

_____

_____

_____

- If the dividend is not a multiple of the divisor and greater than the 10th or 11th multiple of the divisor, we count back till we reach the closest multiple.

(23) ÷ 2 = 11 R 1

(22) (1)   1 < 2 so R = 1

$22 ÷ 2 = 11$

(54) ÷ 5 = _____

(50) (4)   4 < 5 so R = ___

_____

23 is an odd number so it is not a multiple of 2. Multiples of 2 are all even numbers. We go back to the 2 times table. $10 \times 2 = 20$ $11 \times 2 = 22$ $12 \times 2 = 24$ → 23 is between 22 and 24. We choose the smaller multiple which is 22: $11 \times 2 = 22$ The difference between 23 and 22 is 1. So the remainder is 1.	54 is not a multiple of 5. Multiples of 5 have 0 or 5 in the ones place .We go back to 5 times table. $10 \times 5 = 50$ $11 \times 5 = 55$ → 54 is between 50 and 55. We choose the smaller multiple which is 50: $10 \times 5 = 50$ The difference between 54 and 50 is 4. So the remainder is 4.

More examples:

29 ÷ 3 = _____

27   2   2 < 3 so R = _____

27 ÷ 3 = _____

33 ÷ 4 = _____

○   ○   _____

_____

29 is not a multiple of 3. We go back to 3 times table. $8 \times 3 = 24$ $9 \times 3 = 27$ $10 \times 3 = 30$ → 29 is between 27 and 30. We choose the smaller multiple which is 27: $9 \times 3 = 27$ The difference between 29 and 27 is 2. So the remainder is 2.	33 is an odd number so it is not a multiple of 4. Multiples of 4 are all even numbers. We go back to the 4 times table. $8 \times 4 = 32$ $9 \times 4 = 36$ → 33 is between 32 and 36. We choose the smaller multiple which is 32: $8 \times 4 = 32$ The difference between 33 and 32 is 1. So the remainder is 1.