DIVISIBILITY

A number is said to be divisible by another number if there is no remainder after the division has occurred.

ex: 12 is divisible by 2 as $12 \div 2 = 6$

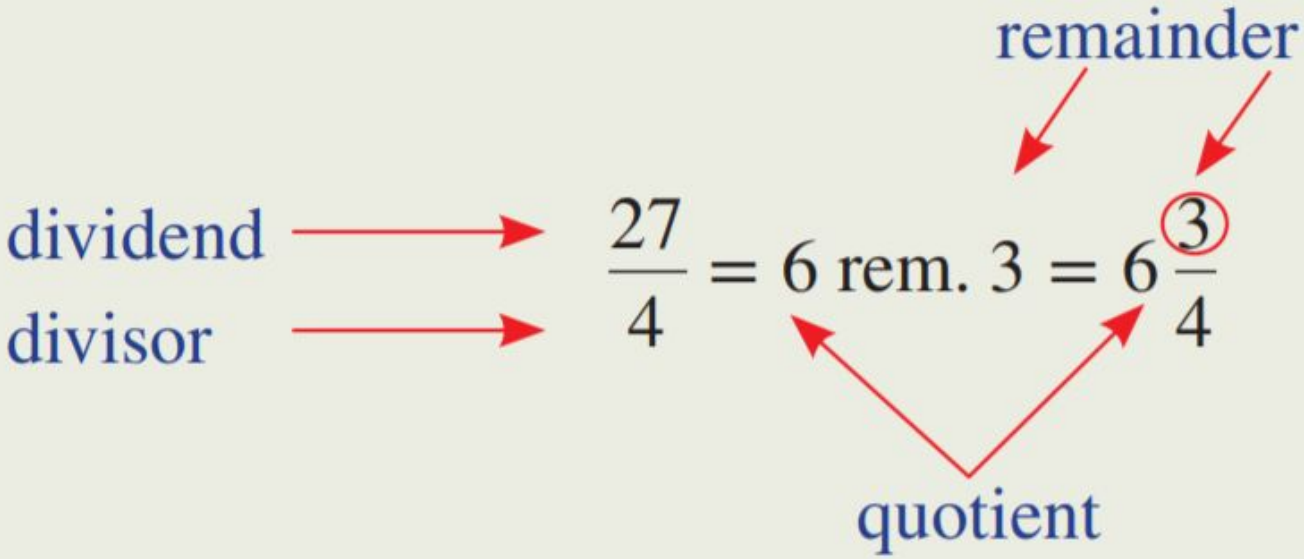
14 is NOT divisible by 5 as $14 \div 5 = 2$ rem 3

If the division divides the dividend exactly, then the divisor is said to be a factor of that number.

ex: in the example above, 2 is a factor of 12

DIVISION NOTATION

Example: $27 \div 4 = 6$ remainder 3



Another way of representing this information is $27 = 4 \times 6 + 3$

DIVISIBILITY - KEY TERMS

- DIVIDEND: the starting number; the total; the amount you have
- DIVISOR: the number doing the dividing; the number of groups
- QUOTIENT: the number of times the divisor went into the dividend
- REMAINDER: the number left over; the number remaining

2

Numbers that end in 0, 2, 4, 6 or 8 are even and can be divided by 2.

32
14
206
68
30

3

The sum of the digits must be divisible by 3.

63
27
12
6
48

4

The number formed from the last two digits must be divisible by 4.

12
312
16
216

5

The last digit must be 0 or 5.

30
50
75
85
125

6

The number must be divisible by 2 and 3.

48
24
24
6
72

7

There is no test for divisibility by 7.

49
56
63
70

8

The number formed from the last three digits must be divisible by 8.

64
40
120
320
4320

9

The sum of the digits must be divisible by 9.

54
216
621
882

10

The last digit must be 0.

90
200
650
2130