

## REDUCING FRACTIONS TO THEIR SIMPLEST TERMS

If both the top (numerator) and the bottom (denominator) of a fraction can be divided by the SAME number, the fraction can be written in the simplest form (reduced).

$$\begin{aligned} \text{e.g. } & \frac{15}{21} \quad \text{Both 15 and 21 can be divided by 3.} \\ & 15 \div 3 = 5 \quad \text{and} \quad 21 \div 3 = 7 \\ \text{so } & \frac{15}{21} \text{ can be written as } \frac{5}{7} \end{aligned}$$

We always write fractions in their **SIMPLEST** form.

### RULES OF DIVISIBILITY

[1] If a number is **EVEN**, it is divisible by **2**. (This also takes care of 4, 6, and 8).

[2] **If the digits of a number, when added up, are divisible by 3**, then the complete number is divisible by **3**.

e.g. 453

$4+5+3=12$ . 12 is divisible by 3, so 453 will be divisible by 3.

[3] If number **ends in either '0' or '5'**, then the complete number is divisible by **5**.

e.g. 126785 ends in 5. Therefore the complete number is divisible by 5.

[4] **If the digits of a number, when added up, are divisible by 9**, then the complete number is divisible by **9**.

e.g. 4536

$4+5+3+6=18$ . 18 is divisible by 9, so 4536 will be divisible by 9.

[5] If number **ends in '0'**, then the complete number is divisible by **10**.

e.g. 1267850 ends in 0. Therefore the complete number is divisible by 10.

[6] There is no shortcut for 7. So check **MANUALLY** if a number is divisible by **7**.