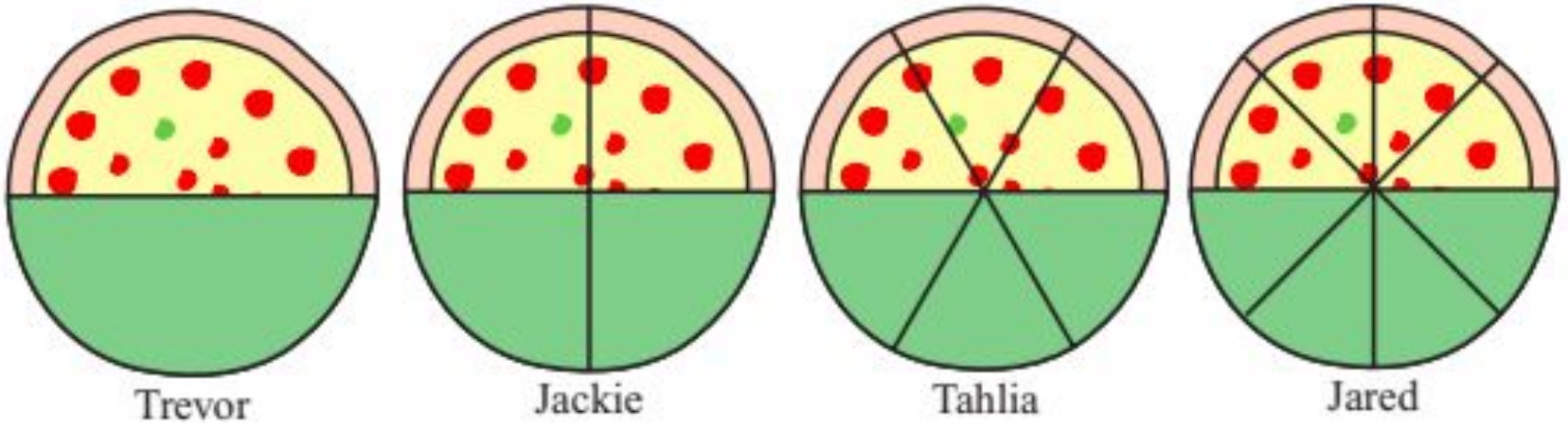
EQUIVALENT FRACTIONS



$$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$$

These fractions are called equivalent fractions.

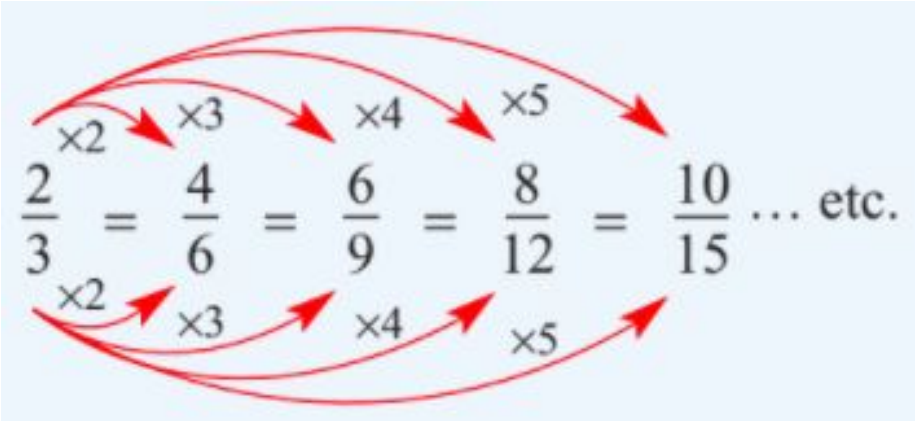
EQUIVALENT FRACTIONS

Equivalent fractions:

- represent the same number (i.e. mark the same place on the number line)
- are produced by:
  - multiplying the numerator and denominator by the same number
  - dividing the numerator and denominator by the same number

EQUIVALENT FRACTIONS

Example 1:



Example 2: $\frac{2}{7} = \frac{4}{14} = \frac{6}{21} = \frac{10}{35} = \frac{242}{847}$

Fractions should always be written in their simplest forms.

So at the end of a calculation where the result is a fraction, you should check that the fraction is in its simplest form.

SIMPLIFYING FRACTIONS

The simplest form of a fraction is when the numerator and denominator have been divided by the highest common factor (HCF).

example:

$$\frac{28}{63} = \frac{4\times7}{9\times7} = \frac{4}{9}$$ (7 is the HCF of 28 and 63)

The fraction $\frac{4}{9}$ cannot be simplified anymore; $\frac{4}{9}$ is the simplest form of $\frac{28}{63}$