

Edexcel GCSE maths June 2013, Calculator paper

6 Tame Valley is a company that makes yoghurt.

A machine fills trays of 20 pots with yoghurt.

In one hour, the machine fills a total of 15000 pots.

Work out how many seconds the machine takes to fill each tray of 20 pots.

The number of trays filled in one hour is $\frac{15000}{20} = 750$ trays per hour.

There are $60 \times 60 = 3600$ seconds in one hour so the machine fills 750 trays in 3600 seconds.

Dividing both of these numbers by 750 we find that the machine fills 1 tray in $\frac{3600}{750} = 4.8$ seconds.