# I – Définition :

Une division décimale est la recherche d’un **quotient** (qui peut être décimal) tel que :

**Exemple :**

* On effectue la division normalement en ajoutant des zéros au dividende si la division n'est pas encore terminée.
* On ajoute la virgule au quotient au même rang que le dividende.  
  Lorsque le reste est nul, la division est terminée.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | 3 | 2, | 0 | 5 |  | | - | 3 | 0 |  | 6, | 4 | |  |  | 2 | 0 |  |  | |  | - | 2 | 0 |  |  | |  |  |  | 0 |  |  | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | 5, | 4 | 8 | 4 |  |  | | - | 4 |  |  | 1, | 3 | 7 | |  | 1 | 4 |  |  |  |  | | - | 1 | 2 |  |  |  |  | |  |  | 2 | 8 |  |  |  | |  | - | 2 | 8 |  |  |  | |  |  |  | 0 |  |  |  | |

Remarque :

* Certaines divisions ne s’arrêtent pas, on s'arrête donc lorsque l'un des reste dans la partie décimal est identique à l'un des précédents.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | 7, | 0 | 0 | 0 | 6 |  |  |  | | - | 6 |  |  |  | 1, | 1 | 6 | 6 | |  | 1 | 0 |  |  |  |  |  |  | | - |  | 6 |  |  |  |  |  |  | |  |  | **4** | **0** |  |  |  |  |  | |  | - | 3 | 6 |  |  |  |  |  | |  |  |  | **4** | **0** |  |  |  |  | |  |  | - | 3 | 6 |  |  |  |  | |  |  |  |  | 4 |  |  |  |  | | Ici la division ne se termine jamais car le reste est identique deux fois de suite. Le quotient de 7 par 6 n'est donc pas un nombre décimal. |

# II – Divisions particulières :

Il existe des divisions particulières :

* Division par 1 : le quotient est égal au dividende.
* Division par 10 : on déplace la virgule d'un rang vers la gauche.
* Division par 100 : on déplace la virgule de deux rangs vers la gauche.
* Division par 1 000 : on déplace la virgule de trois rangs vers la gauche.
* ...

**Exemple :**

Remarque :

* De manière générale dans ce type de division, on déplace la virgule d'autant de rang qu'il y a de zéro.