Answers to Practice Exercises for Chapter 13 – Decimals

Set A - Question 1j

Changing the denominator method:

This will not work as there is no multiple of 11 that will give a denominator of 10, 100, 1000 or so on. You have to divide the numerator by the denominator as shown below.

Dividing the numerator by the denominator method:

```
     0 . 6 3 6 ...
11 | 7 6 . 1 0 0 0 ...
     6 6
       4 3 1 0
       3 3
         7 0 ←Remainders
               start repeating
```

or as a short division:

```
     0 . 6 3 6 3 6 ...
11 | 7 . 7 0 4 0 7 0 4 0 7 0 ...
                ↑
                Remainders
                start repeating
```

$\frac{7}{11} = 0.\dot{6}\dot{3}$ The dots indicates that this is a recurring decimal.