

Work out the missing numbers

$$\begin{array}{r} 1597 \\ 2 \overline{) } \end{array}$$

$$\begin{array}{r} 1597 \\ 2 \overline{) \square\square\square\square} \end{array}$$

1. Why must the numbers in the boxes only be the digits 0-9?

$$\begin{array}{r} 1597 \\ 2 \overline{) \color{red}\square\square\square\square} \end{array}$$

2. What are the possible digits that could go in the red box?

$$\begin{array}{r} 1\color{yellow}\color{blue}597 \\ 2 \overline{) \square\square\square\square} \end{array}$$

3. How do we know that the yellow box must represent 10?

$$\begin{array}{r} 1597 \\ 2 \overline{) \color{red}\square\color{yellow}\square\square} \end{array}$$

4. How do we know that the red box must be 3 and not 2?

1. Each box represents the place value of the number we are dividing

2. The number 2 only goes into 2 and 3 once

3. The number 2 goes into ten 5 times

4. We cannot write 10 in the yellow box, so it can only become 10 if there is a remainder from the first box

The answer must be this:

$$\begin{array}{r} 1597 \\ 2 \overline{) 3194} \end{array}$$