Fast Five

1. 362 x 24 =
2. 6002 x 100 =
3. 140 divided by 7 =
4. 361 - 72 =
5. 2348 + 338 =

Answers

1. 362 x 24 = 8688
2. 6002 x 100 = 600200
3. 140 divided by 7 = 20
4. 361 - 72 = 289
5. 2348 + 338 = 2686

Can I multiply a 4 digit number by a 2 digit number ?

Today we will be using what we learnt yesterday, and building on that knowledge to look at multiplying 4 digit numbers.

Look at the next worked example to remind yourself of the steps.

247 × 32

```
    2 4 7
  ×   3 2
  ─────────
    4 9 4
  7 4 1 0
  ─────────
  7 9 0 4
```

Multiply the top numbers by the bottom unit originally e.g. 7 x 2, 4 x 2, 2 x 2.

Then on the next line down place a 0 as a place holder for multiplying by 10.

Following this, multiply the top numbers by the bottom tens column e.g. 7 x 3, 4 x 3, 2 x 3.

Finally, add the two numbers together.

Why is the place holder so important?
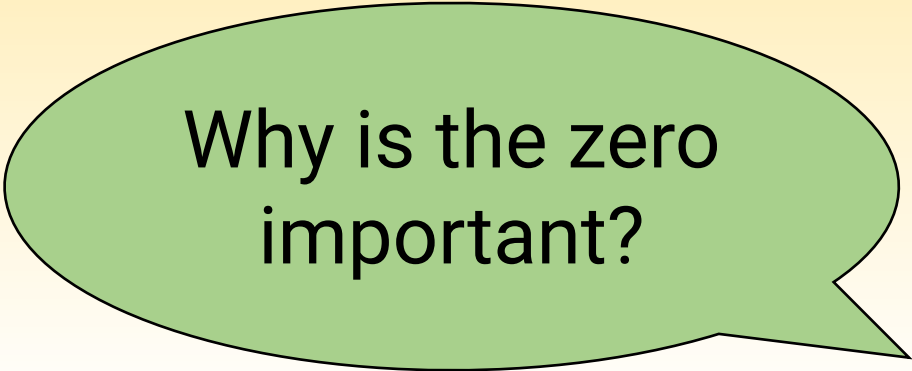
What does it represent?

What would happen without it?

<u>Zero place holder</u>

We use the placeholder of 0 because we are multiplying by a tens number. It is important, when setting out the question, that we place the zero immediately, so it is not forgotten.

Try this one:

745 x 24

Why is the zero important?

Answer

$$\begin{array}{r} 7\ 4\ 5 \\ 2\ 4\ \times \\ \hline 2\ 9\ 8\ 0 \\ 1\ 4\ 9\ 0\ 0\ + \\ \hline 1\ 7\ 8\ 8\ 0 \end{array}$$
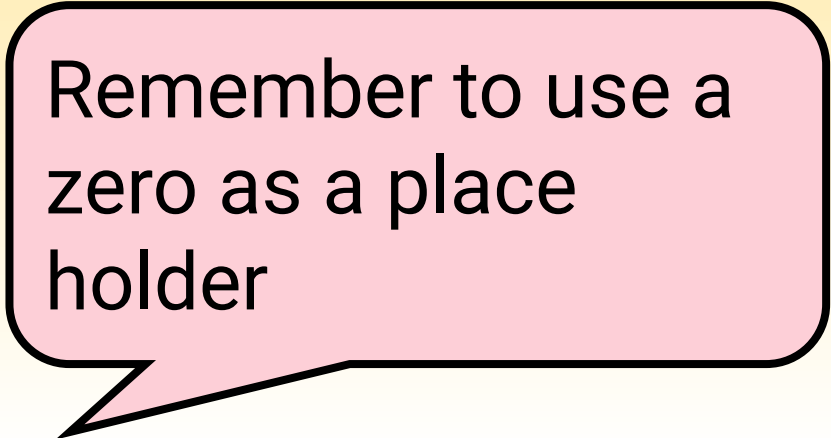
Try this one:

214 x 45

Remember to use a zero as a place holder

Answer

$$
\begin{array}{r}
2\ 1\ 4 \\
4\ 5 \times \\
\hline
1\ 0\ 7\ 0 \\
8\ 5\ 6\ \color{red}{0} + \\
\hline
9\ 6\ 3\ 0
\end{array}
$$

Multiplying a 4 digit number by a 2 digit number

You follow the same process as multiplying a digit number. You just have to remember to multiply the thousands column as well.

Try completing 1745 x 44

Answer

$$1745$$
$$44 \times$$
$$6980$$

$$6 9 8 0 0 +$$

$$76780$$