ASPIRE TO POWER LEARNING

Year 4 | Number

Multiplying and dividing by tens and hundreds

Learn and practise | Free preview

A sample from this topic. The complete topic collection contains three different resources and worked solutions.

Show your thinking using words, working or a labelled drawing. Use the explanations and example first.

What you will practise

• Multiplying and dividing by tens and hundreds

• Explain and check an answer with an appropriate representation.

Useful starting skills: Use objects, drawings or a number line to explain a simple idea.

Multiplying by 10 makes each digit worth ten times as much. Dividing by 10 makes its value one tenth as much. Use a place-value chart to track the change.

For a multiple such as 30, use 3×10. You can multiply by 3 then by 10, or divide by 3 then by 10 when the division is exact. Explain the value change rather than saying that a decimal point moves.

Worked example

Calculate 24×30.

30=3×10, so first 24×3=72.

Multiply 72 by 10 to obtain 720.

Answer: 720

Try it yourself

Name: _____ Date: _____

1. Calculate 37 ×100 without a calculator. Explain the place-value steps.

2. Calculate 42 ×30 without a calculator. Explain the place-value steps.

Answers and explanations

Check the method as well as the final answer. An alternative correct method is also valid.

1. 3700

Use the factorisation of 100 into a one-digit factor and powers of 10. The result is 3700; the inverse operation recovers 37.

2. 1260

Use the factorisation of 30 into a one-digit factor and powers of 10. The result is 1260; the inverse operation recovers 42.

Curriculum reference: VC2M4N05

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