

Discussion Problems

Step 2: Subtracting Decimals within 1

National Curriculum Objectives:

Mathematics Year 5: (5F10) [Solve problems involving number up to 3dp.](#)

Mathematics Year 5: (5M9a) [Use all four operations to solve problems involving measure \[for example, length, mass, volume, money\] using decimal notation, including scaling.](#)

About this resource:

This resource has been designed for pupils who understand the concepts within [this step](#). It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More [Year 5 Decimals](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Subtracting Decimals within 1

1. Callum and Jessica like different strengths of orange juice. Callum makes his drink using 0.107 litres of concentrated juice, while Jessica uses twice as much.



If they share a one litre bottle of concentrated juice, how many servings can they each have?

If the two friends drink an unequal number of servings, what possible combinations might there be?

DP

2. Estimate the decimal indicated by the arrow on the number line below. Fill in the number sentence with your estimate as the answer.



$$0.764 - \boxed{} = \boxed{}$$

Is your answer the same as your partner's?

What is the difference between your two answers?

DP

Subtracting Decimals within 1

1. Callum and Jessica like different strengths of orange juice. Callum makes his drink using 0.107 litres of concentrated juice, while Jessica uses twice as much.



If they share a one litre bottle of concentrated juice, how many servings can they each have?

They can each have three servings (there will be 0.037 litres remaining).

If the two friends drink an unequal number of servings, what possible combinations might there be?

Various possible answers, for example: Callum could make five drinks (0.535 litres) and Jessica could make two drinks (0.428 litres), leaving 0.037 litres remaining.

DP

2. Estimate the decimal indicated by the arrow on the number line below. Fill in the number sentence with your estimate as the answer.

Various possible answers, for example:



$$0.764 - \boxed{0.527} = \boxed{0.237}$$

Is your answer the same as your partner's? **Children may have various answers.**

What is the difference between your two answers? **Children may have various answers.**

DP