

Teacher Notes - Lesson Information

This open-ended task can be used at the introduction of the topic, during explicit teaching or as an assessment item at the end of the teaching/learning cycle.

Learning Task

Students are required to calculate what three decimal numbers when added together make a number in the hundreds with two decimal places.

The open-ended lesson is generally broken into the below format.

- As a whole class spend **5 minutes** introducing the task (read through the question/problem and identify important information, discuss time for completing the task and how to work in the zone of confusion/get out of the pit).
- Students work for **5 minutes** independently in the 'zone of confusion' (tackling the task by themselves, using 'tools' to get out of the 'pit').
- Students can seek 'four before me' and workshop ideas with peers whilst working for a further **15 minutes** on the task. Some students may wish to attempt the 'challenge/extender' task during this 15 minutes if they have answered the initial question and feel confident in moving forward.
- During students' working time, the teacher moves around the room offering support and posing questions to students to gain a deeper understanding of their knowledge of the topic being covered.
- The class are then brought back together where some student work is projected on the whiteboard and discussed (with the use of a visualiser/camera/interactive whiteboard or drawn on the board by the student). Student samples are carefully chosen to demonstrate growth in learning and a variety of possible methods to complete the problem. Students are given the opportunity to explain their solutions.

Students will complete the above question without the use of technology. Students will show all their possible answers with calculations shown.

Answers

Students are required to use addition of decimal numbers to work out what three numbers when added together fit the answer requirements. Example: $25.50 + 104.25 + 70.10 = 199.85$

Students will show all of their calculations, including any regrouping that may be required.

All numbers used will be decimal numbers.

At least one of the numbers needs to be under 100.

Adding Decimal Numbers

I can add decimal numbers (ACMNA128).

I added some decimal numbers together and got an answer which looked like this:

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The answer did not end in zero.

One of the numbers I used was under 100.

What could have the three decimal numbers been?

What could the answer be? (Show all of your working out.)

Show your workings out here.



Challenge

If all three numbers used are under 100 what could they be?

Show your workings out here.