

Homework

Adding Decimals – Crossing the Whole

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

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Add the decimals represented by the place value counters, crossing the whole, using hundredths and tenths.

Expected Add the decimals represented by the place value counters, crossing the whole, using thousandths, hundredths and tenths.

Greater Depth Add the decimals represented by the place value counters, crossing the whole, using thousandths, hundredths and tenths (with unconventional partitioning).

Questions 2, 5 and 8 (Varied Fluency)

Developing Identify if statements adding decimals, crossing the whole, using hundredths and tenths are correct.

Expected Identify if statements adding decimals, crossing the whole, using thousandths, hundredths and tenths are correct.

Greater Depth Identify if statements adding decimals, crossing the whole, using thousandths, hundredths and tenths (with unconventional partitioning) are correct.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

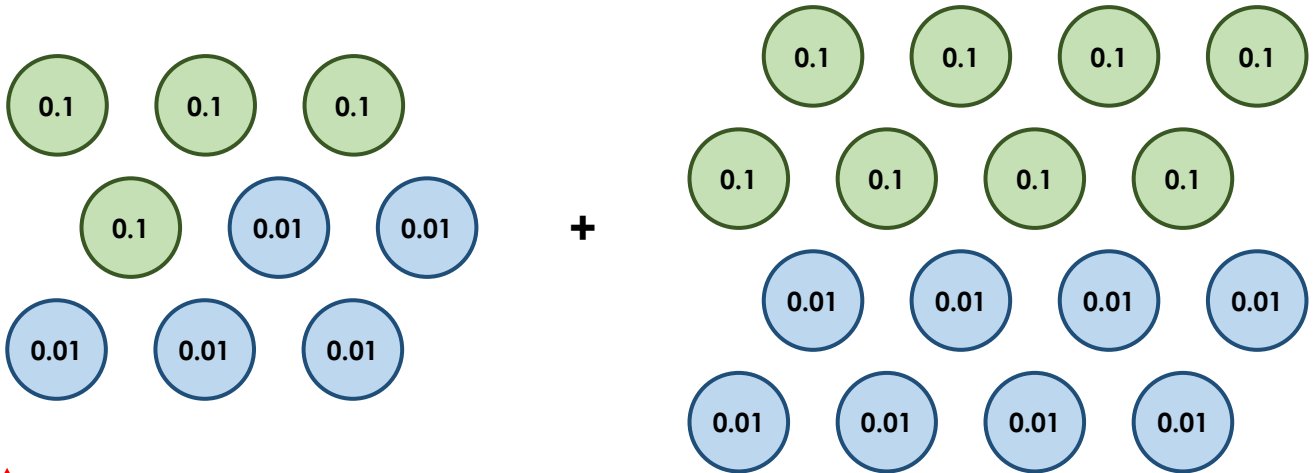
Developing Match the decimals to create 4 addition number sentences, crossing the whole, using hundredths and tenths.

Expected Match the decimals to create 4 addition number sentences, crossing the whole, using thousandths, hundredths and tenths.

Greater Depth Match the decimals to create 4 addition number sentences, crossing the whole, using thousandths, hundredths and tenths (with unconventional partitioning).

Adding Decimals – Crossing the Whole

1. Add the numbers represented by the place value counters below.



VF
HW/Ext

2. True or false?

- A $0.38 + 0 \text{ ones, } 8 \text{ tenths and } 4 \text{ hundredths} = 1.22$
- B $0 \text{ ones, } 6 \text{ tenths and } 2 \text{ hundredths} + 0.59 = 1.11$
- C $0.24 + 0 \text{ ones, } 9 \text{ tenths and } 7 \text{ hundredths} = 1.21$
- D $0 \text{ ones, } 5 \text{ tenths and } 3 \text{ hundredths} + 0.89 = 1.32$



VF
HW/Ext

3. Match the numbers below to create 4 calculations.

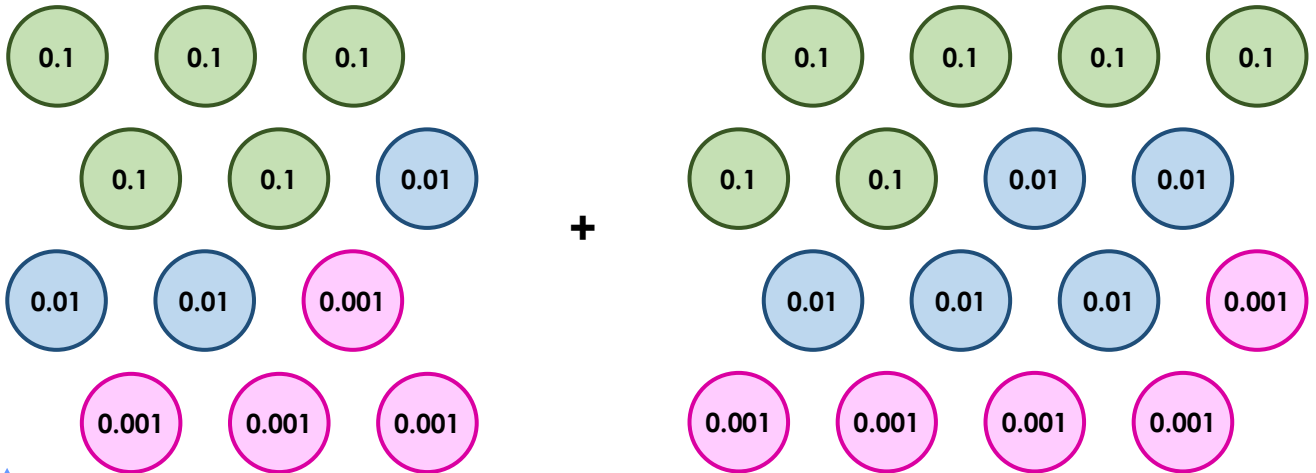
0.49	0 ones, 6 tenths and 9 hundredths	1.43
0.72	0 ones, 5 tenths and 8 hundredths	1.22
+		=
0.56	0 ones, 7 tenths and 3 hundredths	1.51
0.93	0 ones, 8 tenths and 7 hundredths	1.41



RPS
HW/Ext

Adding Decimals – Crossing the Whole

4. Add the numbers represented by the place value counters below.



VF
HW/Ext

5. True or false?

- A $0.74 + 0 \text{ ones, } 5 \text{ tenths and } 9 \text{ hundredths} = 1.43$
- B $0 \text{ ones, } 3 \text{ tenths, } 6 \text{ hundredths and } 1 \text{ thousandth} + 0.858 = 1.219$
- C $0.497 + 0 \text{ ones, } 9 \text{ tenths, } 4 \text{ hundredths and } 5 \text{ thousandths} = 1.442$
- D $0 \text{ ones, } 6 \text{ tenths, } 2 \text{ hundredths and } 8 \text{ thousandths} + 0.693 = 1.221$



VF
HW/Ext

6. Match the numbers below to create 4 calculations.

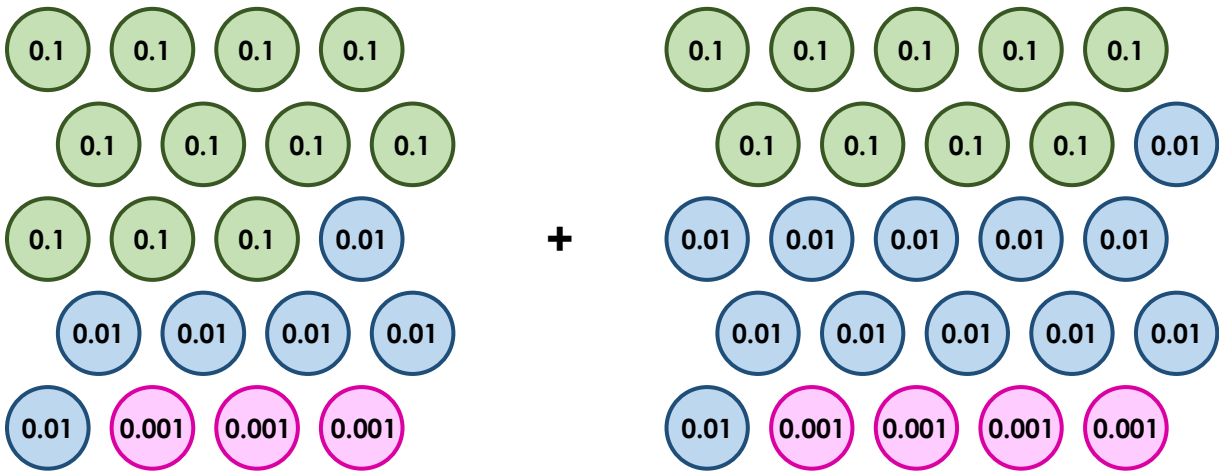
0.265	0 ones, 3 tenths, 7 hundredths and 8 thousandths	1.25
0.57	0 ones, 9 tenths, 4 hundredths and 8 thousandths	1.201
+		=
0.834	0 ones, 5 tenths, 9 hundredths and 1 thousandth	1.212
0.61	0 ones, 6 tenths and 8 hundredths	1.213



RPS
HW/Ext

Adding Decimals – Crossing the Whole

7. Add the numbers represented by the place value counters below.



VF
HW/Ext

8. True or false?

- A $0.846 + 0 \text{ ones, } 54 \text{ hundredths and } 3 \text{ thousandths} = 1.289$
- B $0 \text{ ones, } 9 \text{ tenths, and } 74 \text{ thousandths} + 0.657 = 1.632$
- C $0.725 + 0 \text{ ones, } 49 \text{ hundredths and } 6 \text{ thousandths} = 1.221$
- D $0 \text{ ones, } 6 \text{ tenths, and } 82 \text{ thousandths} + 0.949 = 1.531$



VF
HW/Ext

9. Match the numbers below to create 4 calculations.

0.384	0 ones, 5 tenths and 59 thousandths	1.332
0.529	0 ones, 67 hundredths and 8 thousandths	1.523
+		=
0.673	0 ones, 9 tenths and 48 thousandths	1.321
0.845	0 ones, 79 hundredths and 2 thousandths	1.232



RPS
HW/Ext

Homework

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Developing

1. 1.33
2. A – True; B – False, the correct answer is 1.21; C – True; D – False, the correct answer is 1.42.
3. $0.49 + 0 \text{ ones, } 7 \text{ tenths and } 3 \text{ hundredths} = 1.22$; $0.72 + 0 \text{ ones, } 6 \text{ tenths and } 9 \text{ hundredths} = 1.41$; $0.56 + 0 \text{ ones, } 8 \text{ tenths and } 7 \text{ hundredths} = 1.43$; $0.93 + 0 \text{ ones, } 5 \text{ tenths and } 8 \text{ hundredths} = 1.51$

Expected

4. 1.189
5. A – False, the correct answer is 1.33; B – True; C – True; D – False, the correct answer is 1.321.
6. $0.265 + 0 \text{ ones, } 9 \text{ tenths, } 4 \text{ hundredths and } 8 \text{ thousandths} = 1.213$; $0.57 + 0 \text{ ones, } 6 \text{ tenths and } 8 \text{ hundredths} = 1.25$; $0.834 + 0 \text{ ones, } 3 \text{ tenths, } 7 \text{ hundredths and } 8 \text{ thousandths} = 1.212$; $0.61 + 0 \text{ ones, } 5 \text{ tenths, } 9 \text{ hundredths and } 1 \text{ thousandth} = 1.201$

Greater Depth

7. 2.187
8. A – False, the correct answer is 1.389; B – False, the correct answer is 1.631; C – True; D – False, the correct answer is 1.631.
9. $0.384 + 0 \text{ ones, } 9 \text{ tenths and } 48 \text{ thousandths} = 1.332$; $0.529 + 0 \text{ ones, } 79 \text{ tenths and } 2 \text{ thousandths} = 1.321$; $0.673 + 0 \text{ ones, } 5 \text{ tenths and } 59 \text{ thousandths} = 1.232$; $0.845 + 0 \text{ ones, } 67 \text{ tenths and } 8 \text{ thousandths} = 1.523$