

Homework/Extension

Step 1: Adding Decimals Within 1

National Curriculum Objectives:

Mathematics Year 5:(5F10) [Solve problems involving number up to three decimal places](#)
Mathematics Year 5: (5M9a) [Use all four operations to solve problems involving measure \[for example, money\] using decimal notation, including scaling](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Tick the missing decimal number. Adding decimals within 1 using hundredths and tenths, no exchanges. Use of a hundred square for support.

Expected Tick the missing decimal number. Adding decimals within 1 using thousandths, hundredths and tenths with exchanges. Use of a hundred square for support.

Greater Depth Tick the missing decimal number. Adding decimals within 1 using thousandths, hundredths and tenths with multiple exchanges per question.

Questions 2, 5 and 8 (Varied Fluency)

Developing Complete the number sequences by following the given rule. Adding decimals within 1 using hundredths and tenths, no exchanges. Use of a place value grid for support.

Expected Complete the number sequences by following the given rule. Adding decimals within 1 using thousandths, hundredths and tenths with exchanges.

Greater Depth Complete the number sequences by following the given rule. Adding decimals within 1 using thousandths, hundredths and tenths with multiple exchanges per question.

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

Developing Identify the starting number. Adding decimals within 1 using hundredths and tenths, no exchanges.

Expected Identify the starting number. Adding decimals within 1 using thousandths, hundredths and tenths with exchanges.

Greater Depth Identify the starting number. Adding decimals within 1 using thousandths, hundredths and tenths with multiple exchanges per question.

More [Year 5 Decimals](#) resources.

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

Adding Decimals Within 1

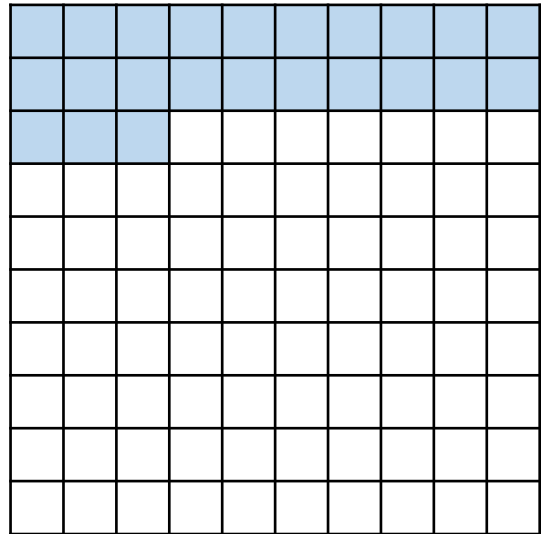
1. Tick the missing decimal in the calculation below. Use the hundred square to help you.

$$7.23 + \boxed{} = 7.29$$

0.06

0.05

0.6



VF
HW/Ext

2. Complete the number sequences by following the given rule.

Rule

+ 0.02

A. 0.61, 0.63, 0.65,

+ 0.3

B. 0.1, 0.4, 1

Ones	Tenths	Hundredths	Thousandths



VF
HW/Ext

3. Alfie has removed 5 tenths counters and is left with the number below.



I took away 5 tenths counters.

Ones	Tenths	Hundredths
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 0.1 0.1 </div> <div style="text-align: center;"> 0.1 0.1 </div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 0.01 0.01 </div> <div style="text-align: center;"> 0.01 0.01 </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div style="text-align: center;"> 0.01 0.01 </div> <div style="text-align: center;"> 0.01 0.01 </div> </div>

What number did Alfie start with? Prove it.



RPS
HW/Ext

Adding Decimals Within 1

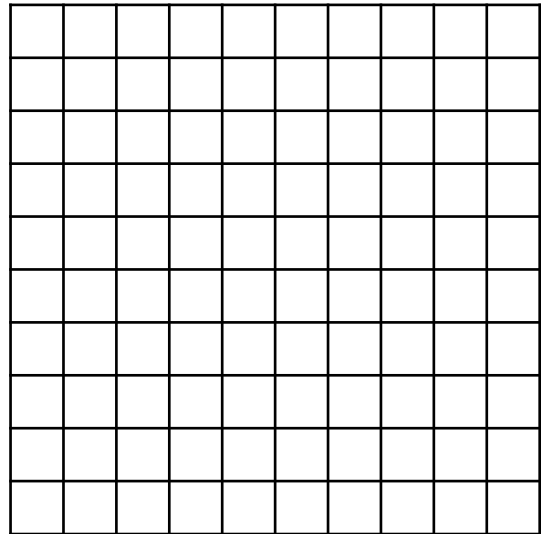
4. Tick the missing decimal in the calculation below. Use the hundred square to help you.

$$3.567 + \boxed{} = 3.571$$

0.04

0.004

0.4



VF
HW/Ext

5. Complete the number sequences by following the given rule.

Rule

+ 0.002

A. 0.013, 0.015, 0.017,

+ 0.003

B. 0.024, 0.027, , 0.033

+ 0.05

C. 0.115, 0.165, ,



VF
HW/Ext

6. Nathan has removed 6 hundredths counters and is left with the number below.



I took away 6 hundredths counters.

Ones	Tenths	Hundredths	Thousandths
	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: lightblue; display: flex; align-items: center; justify-content: center;">0.1</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: lightblue; display: flex; align-items: center; justify-content: center;">0.1</div> </div> <div style="display: flex; justify-content: center; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: lightblue; display: flex; align-items: center; justify-content: center;">0.1</div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: pink; display: flex; align-items: center; justify-content: center;">0.01</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: pink; display: flex; align-items: center; justify-content: center;">0.01</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: pink; display: flex; align-items: center; justify-content: center;">0.01</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: pink; display: flex; align-items: center; justify-content: center;">0.01</div> </div> <div style="display: flex; justify-content: center; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: pink; display: flex; align-items: center; justify-content: center;">0.01</div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: purple; display: flex; align-items: center; justify-content: center;">0.001</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: purple; display: flex; align-items: center; justify-content: center;">0.001</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: purple; display: flex; align-items: center; justify-content: center;">0.001</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: purple; display: flex; align-items: center; justify-content: center;">0.001</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: purple; display: flex; align-items: center; justify-content: center;">0.001</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: purple; display: flex; align-items: center; justify-content: center;">0.001</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: purple; display: flex; align-items: center; justify-content: center;">0.001</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; background-color: purple; display: flex; align-items: center; justify-content: center;">0.001</div> </div>

What number did Nathan start with? Prove it.



RPS
HW/Ext

Adding Decimals Within 1

7. Tick the missing decimal in the calculation below.

$$2.397 + \boxed{} = 2.402$$

0.05

0.005

0.5



VF
HW/Ext

8. Complete the number sequences by following the given rule.

Rule

+ 0.007

A. 0.063, 0.07, 0.077,

+ 0.006

B. 0.092, 0.098, 0.11

+ 0.08

C. 0.325, 0.405,



VF
HW/Ext

9. Eliza has removed 9 thousands counters and is left with the number below.



I took away 9 thousands counters.

Ones	Tenths	Hundredths	Thousandths
	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid blue; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.1</div> <div style="border: 1px solid blue; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.1</div> </div> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid blue; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.1</div> <div style="border: 1px solid blue; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.1</div> </div> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid blue; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.1</div> <div style="border: 1px solid blue; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.1</div> </div>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.01</div> <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.01</div> <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.01</div> </div> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.01</div> <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.01</div> <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.01</div> </div> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.01</div> <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.01</div> <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.01</div> </div>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid purple; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.001</div> <div style="border: 1px solid purple; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.001</div> </div> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid purple; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.001</div> <div style="border: 1px solid purple; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.001</div> </div> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid purple; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.001</div> <div style="border: 1px solid purple; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.001</div> </div> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid purple; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.001</div> <div style="border: 1px solid purple; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">0.001</div> </div>

What number did Eliza start with? Prove it.



RPS
HW/Ext

Homework/Extension

Adding Decimals Within 1

Developing

1. **0.06**
2. **A. 0.67; B. 0.7**
3. **Alfie started with the number 0.96 because $0.46 + 0.5 = 0.96$.**

Expected

4. **0.004**
5. **A. 0.019; B. 0.03; C. 0.215, 0.265**
6. **Nathan started with the number 0.418 because $0.358 + 0.06 = 0.418$.**

Greater Depth

7. **0.005**
8. **A. 0.084; B. 0.104; C. 0.485, 0.565**
9. **Eliza started with the number 0.707 because $0.698 + 0.009 = 0.707$.**