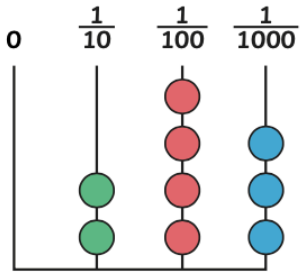
# Y5 Maths Questions – Lesson 1 Part A

**1)** The abacus shows a decimal number - the starting number. Follow the maze and write each answer in the table as you go.




| | | |
|---|---|---|
| Starting number: _____ → | a) Add 2 hundredths more. _____ → | b) Add 4 tenths. _____ ↓ |
| e) What do I need to add to make each digit after the decimal point 9? _____ ← | d) Add 0.301 more. _____ ← | c) Add 0.004 more. _____ |

**2)** Answer these calculations using mental methods and jottings. You could use a hundred square, representing a whole, to help you.

**a)** 0.32 + 0.07 = _____

**b)** 0.06 + 0.52 = _____

**c)** 0.5 + 0.16 = _____

**d)** 0.6 + 0.02 = _____

**3)** Try these calculations, selecting an appropriate method.

**a)** 0.321 + 0.504 = _____

**b)** 0.065 + 0.756 = _____

**c)** 0.208 + 0.064 = _____

**1)** $0.54 + 0.3\boxed{A} = 0.8\boxed{B}$

**a)** What is the greatest value that A can be? Explain your answer.

**b)** What calculation would this give?

**2)** Is this statement always, sometimes or never true?

Explain your thinking.

**1)** Using any digit 1-9 only once in each calculation, find 4 possible solutions.
(Digits can be repeated in the answer.)

| | | | | |
|---|---|---|---|---|
| | 0 | ? | | |
| | 0 | ? | ? | |
| + | 0 | ? | ? | ? |
| | 0 | ? | ? | ? |

| | | |
|---|---|---|
| 1 | 4 | 7 |
| 2 | 5 | 8 |
| 3 | 6 | 9 |

**2)** You can use the digits 1-9 only once in the calculation but digits can be repeated in the answer. What is the greatest possible total?

**3)** Again, you can use the digits 1-9 only once in the calculation but digits can be repeated in the answer. What is the smallest possible total?

# Y5 Maths ANSWERS – Lesson 1 Part A

1) **Starting number: 0.243**

   a) **0.263**

   b) **0.663**

   c) **0.667**

   d) **0.968**

   e) **Add 0.031**

2) a) **0.39**

   b) **0.58**

   c) **0.66**

   d) **0.62**

3) a) **0.825**

   b) **0.821**

   c) **0.272**

1) a) **A = 0.05**

   **If the hundredths digit was any greater, this would increase the tenths digit.**

   b) **0.54 + 0.35 = 0.89**

2) **The statement is sometimes true. It would be more efficient to add some numbers mentally/with jottings. For example, to find 0.3 + 0.15, it would be more efficient to add mentally. However, to find the sum of 0.357 + 0.586, the column method would be more reliable.**

1) **There are a variety of possible solutions. For example:**

   **0.2 + 0.41 + 0.365 = 0.975**

   **0.3 + 0.14 + 0.265 = 0.705**

   **0.1 + 0.28 + 0.345 = 0.725**

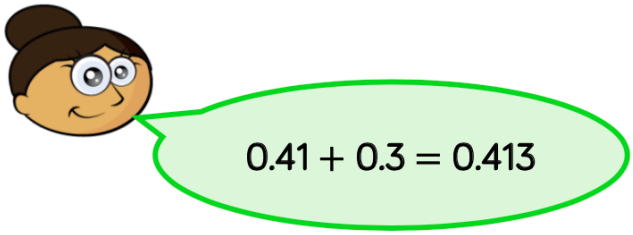
   **0.5 + 0.16 + 0.298 = 0.958**

2) **0.9 + 0.86 + 0.754 = 2.514 (Also accept other combinations of digits that give the same answer.)**

3) **0.1 + 0.24 + 0.356 = 0.696 (Also accept other combinations of digits that give the same answer.)**

**Y5 Maths ANSWERS – Lesson 1 Part B**

What mistake has Mary made?




Can you use at least 2 representations to show why she is incorrect?

Mary has added the hundredths to the thousandths place.

Compare the numbers sentences using <, > or =

| | | |
|---|---|---|
| 0.7 + 0.03 + 0.001 | ◯ | 0.07 + 0.3 + 0.1 |
| 0.4 + 0.1 + 0.05 | ◯ | 0.3 + 0.2 + 0.05 |

> =

Annabelle has some digit cards.

| 0 | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|

She uses each card once to make a number sentence

$$\begin{array}{r} 0.\square\square\square \\ +\ 0.\square\square\square \\ \hline \bullet\square\square\square \end{array}$$

What is the largest number she can make? What is the smallest?

Largest: 0.951

Smallest: 0.159