Adding decimals within 1
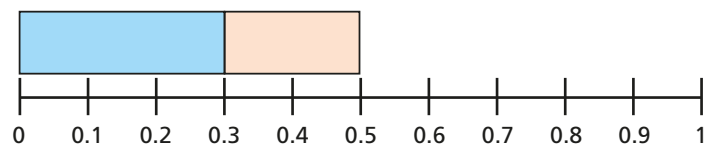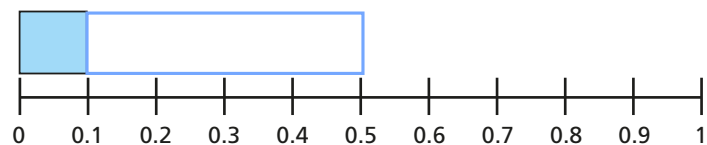
1 Work out the additions.

Use the number lines to help you.
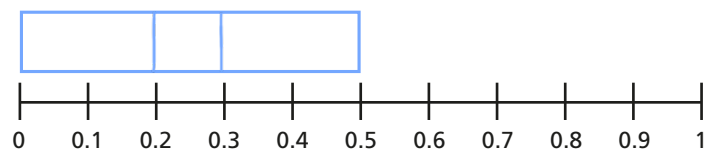
a) 0.3 + 0.2 = 0.5

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

b) 0.1 + 0.4 = 0.5

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

c) 0.2 + 0.1 + 0.2 = 0.5

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

What do you notice about your answers?

2 Complete the part-whole models.

a) 0.4 / 0.1 / 0.3

c) 0.9 / 0.4 / 0.5

b) 0.9 / 0.7 / 0.2

d) 0.555 / 0.05 / 0.5 / 0.005
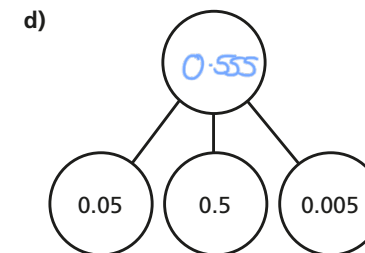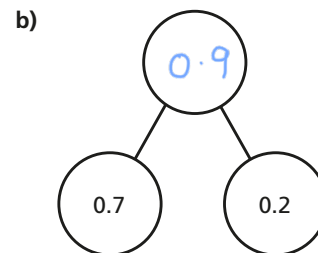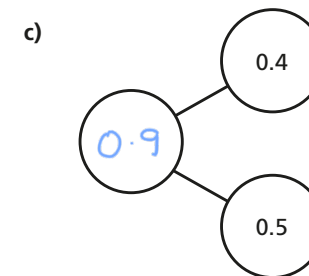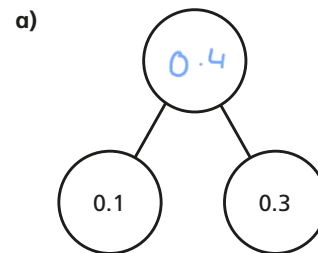
3 Complete the additions.

Use the place value charts to help you.

a) 0.42 + 0.3 = 0.72

Ones	Tenths	Hundredths
	0.1 0.1 0.1 0.1	0.01 0.01
	0.1 0.1 0.1	

b) 0.28 + 0.32 = 0.6

Ones	Tenths	Hundredths
	○○	○○○○ ○○○○
	○○○	○○

c) $0.28 + 0.36 =$ **0.64**

	Ones	Tenths	Hundredths
		O O	0000 0000
+		O O O	000 000 O

---

4 Use the column method to work out the additions.

a)
$$
\begin{array}{r}
0 \cdot 4 \ 2 \\
+ \ 0 \cdot 3 \\
\hline
0 \cdot 7 \ 2 \\
\end{array}
$$

d)
$$
\begin{array}{r}
0 \cdot 4 \ 2 \\
+ \ 0 \cdot 0 \ 3 \ 3 \\
\hline
0 \cdot 4 \ 5 \ 3 \\
\end{array}
$$

b)
$$
\begin{array}{r}
0 \cdot 0 \ 4 \\
+ \ 0 \cdot 3 \ 3 \\
\hline
0 \cdot 3 \ 7 \\
\end{array}
$$

e)
$$
\begin{array}{r}
0 \cdot 4 \ 3 \ 6 \\
+ \ 0 \cdot 1 \ 7 \\
\hline
0 \cdot 6 \ 0 \ 6 \\
\end{array}
$$

c)
$$
\begin{array}{r}
0 \cdot 4 \ 0 \ 2 \\
+ \ 0 \cdot 0 \ 3 \\
\hline
0 \cdot 4 \ 3 \ 2 \\
\end{array}
$$

f)
$$
\begin{array}{r}
0 \cdot 7 \ 5 \ 1 \\
+ \ 0 \cdot 0 \ 9 \\
\hline
0 \cdot 8 \ 4 \ 1 \\
\end{array}
$$

---

5 Jack has set up a column addition to work out 0.19 + 0.07

What mistake has Jack made?

$$
\begin{array}{r}
0 \cdot 1 \quad 9 \\
+ \ 0 \cdot 7 \quad \\
\hline
\cdot \quad \\
\hline
\end{array}
$$

---

6 Add together 7 hundredths and 34 hundredths.

Give your answer as a decimal.

7 hundredths $+$ 34 hundredths = **0.41**

---

7 Eva drinks a quarter of a litre of water.

Mo drinks 0.3 litres of water.

Whitney drinks a tenth of a litre more water than Mo.

How much water do Eva, Mo and Whitney drink altogether?

Eva   0.25 L
Mo   0.3 L
Whitney 0.4 L

0.95 L

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