Adding decimals within 1

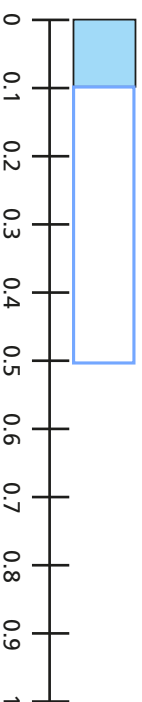**1** Work out the additions.

Use the number lines to help you.
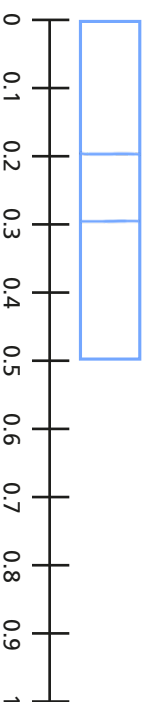
a) 0.3 + 0.2 = $\boxed{0.5}$

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 = $\boxed{0.5}$

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 = $\boxed{0.5}$

0 — 0.1 — 0.2 — 0.3 — 0.4 — 0.5 — 0.6 — 0.7 — 0.8 — 0.9 — 1
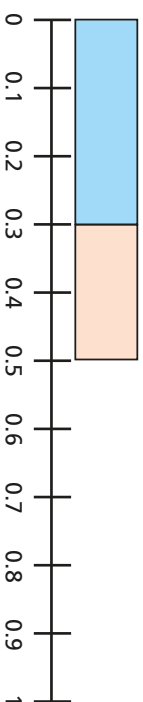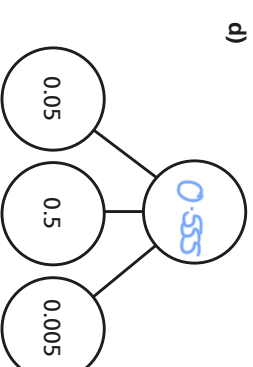
What do you notice about your answers?

2 Complete the part-whole models.

a)
- 0.1
- 0.3
- **0.4**

b)
- 0.7
- 0.2
- **0.9**

c)
- **0.9**
- 0.5
- 0.4

d)
- 0.05
- 0.5
- 0.005
- **0.555**
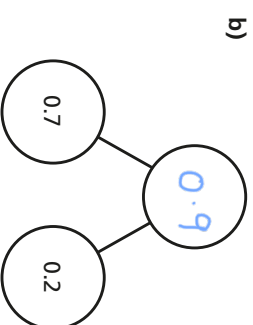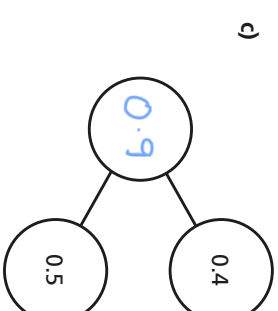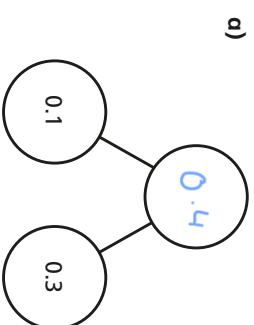
3 Complete the additions.

Use the place value charts to help you.

a) 0.42 + 0.3 = $\boxed{0.72}$

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 = $\boxed{0.6}$

Ones	Tenths	Hundredths
•	0 0	0 0 0 0 0 0
•	0 0 0	0 0

+

c) 0.28 + 0.36 = $\boxed{0.64}$

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

+

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4 Use the column method to work out the additions.

a)

	0	.	4	2
+	0	.	3	
	0	.	7	2

b)

	0	.	0	4
+	0	.	3	3
	0	.	3	7

c)

	0	.	4	0	2
+	0	.	0	3	
	0	.	4	3	2

d)

	0	.	4	2	
+	0	.	0	3	3
	0	.	4	5	3

e)

	0	.	4	3	6
+	0	.	1	7	
	0	.	6	0	6

f)

	0	.	7	5	1
+	0	.	0	0	9
	0	.	8	4	1

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

What mistake has Jack made?

	0	.	1	9
+	0	.	7	
		.		

6 Add together 7 hundredths and 34 hundredths.

Give your answer as a decimal.
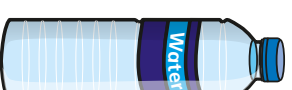
7 hundredths **+** 34 hundredths = $\boxed{0.41}$

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

$\boxed{0.95 \text{ L}}$