

Written addition of 3-digit numbers with regrouping

WHAT THIS LESSON TEACHES

When you add two 3-digit numbers, add each column from the right. If a column comes to ten or more, trade ten of them for one carried into the next column to the left.

→ $156 + 138$: the units $6 + 8 = 14$, so write 4 and carry 1 into the tens.

→ $143 + 126$: no column reaches ten, so no carrying is needed.

MODEL THIS ON THE BOARD

ADDING $437 + 295$ IN COLUMNS

- 1 Add the units: $7 + 5 = 12$. Write **2**, carry **1** to the tens.
- 2 Add the tens: $3 + 9 + 1 = 13$. Write **3**, carry **1** to the hundreds.
- 3 Add the hundreds: $4 + 2 + 1 = 7$. Write **7**.

$$\begin{array}{r} \overset{1}{4} \overset{1}{3} 7 \\ + 295 \\ \hline 732 \end{array}$$

DISCUSSION STARTER

REFLECT When a column made ten or more, how did you remember where to put the carry?

ANSWER KEY

a) 704

b) 422

c) 825

Q1: 269

Q2: 434

Q3: 625

a) **Always** — Ten of one place always trade for one of the next place to the left.

b) **Sometimes** — Only when a column reaches ten, so $143 + 126$ needs none but $437 + 295$ does.

c) **Never** — A units carry always lands in the tens column, just one place to the left.

d) **Always** — Working right to left lets each carry pass to the next column correctly.

EXTENSION SHEET · STRETCH ANSWERS

S1: 14024

S2: 12416

S3: 10332

S4: 13005

S5: 12995

Investigation: Make the biggest total — open-ended; scan pupils' working for valid solution paths rather than a single answer.