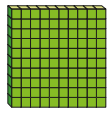# Spot the pattern – making it explicit

1 Complete the number sentences.

Use the place value chart to help you.

H	T	O

a) 222 + 6 = 228

b) 222 + 60 = 282
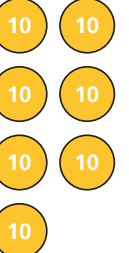
c) 222 + 600 = 822

What do you notice?

2 Complete the number sentences.

Use the place value chart to help you.

H	T	O

a) 777 − 400 = 377   **c)** 777 − 4 = 773

b) 777 − 40 = 737

What do you notice?

3 Complete the number sentences.

a) 315 + 200 = 515   **c)** 405 + 30 = 435

315 + 20 = 335   405 + 50 = 455

315 + 2 = 317   405 + 90 = 495

b) 748 − 200 = 548   **d)** 635 − 300 = 335

748 − 20 = 728   635 − 500 = 135
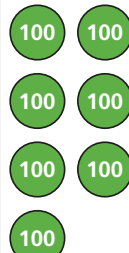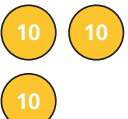
748 − 2 = 746   635 − 600 = 35

4 Amir makes this number on a place value chart.

H	T	O

a) Amir adds some counters to the chart.
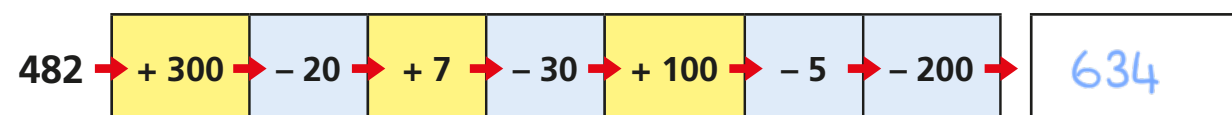
He now has the number 736

What counters did Amir add?

5 ones

b) Amir removes 3 counters from one of the columns.

What numbers could he have now?

Various answers.

5 Work out the end number.

482 → + 300 → − 20 → + 7 → − 30 → + 100 → − 5 → − 200 → **634**

6 Complete the sentences.

a) 500 more than 238 is equal to **738**

b) 528 is **300** more than 228
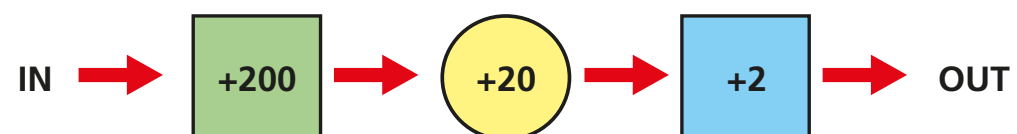
c) 727 is **2** less than 729

d) 64 is **300** less than 364

e) 429 is 20 more than **409**

f) 429 is 20 less than **449**

7 Here is a number machine.

IN → **+200** → **+20** → **+2** → OUT

a) If 476 goes into the machine, what number comes out?
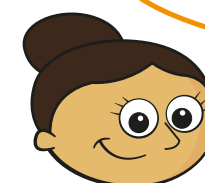
698

b) If 476 comes out of the machine, what number went in?

254

How did you work this out?

Work backwards.   −2, −20, −200

8

When you add 3 tens to a number, the only column that changes is the tens column.

Is Dora correct? __No__

Explain your answer.

263 + 30 = 293   (only the tens change)

273 + 30 = 303   (tens and hundreds change)