

Use formal methods for addition of integers



1

Tens				Ones				
10	10	10	10	1	1	1	1	1
10	10	10		1	1	1	1	1
				1	1			
10	10	10	10	1	1	1	1	1
10	10	10		1	1	1	1	1
				1	1			

a) What addition calculation is represented?

$$\boxed{45} + \boxed{37}$$

b) What exchange needs to be done to complete the calculation?

Exchange 10 ones for 1 ten.

c) Use the grid to complete the calculation.

		4	5
	+	3	7
		8	2
			1

2 Complete the calculations.

a)

		4	3	6
	+	3	4	2
		7	7	8

b)

		4	3	6
	+	3	4	7
		7	8	3
				1

c)

		4	3	6
	+	3	8	7
		8	2	3
				1

3 Write these as column additions and calculate the answers.

a) $3,416 + 2,517$

		3	4	1	6
	+	2	5	1	7
		5	9	3	3

b) $287 + 3,636$

		3	6	3	6
	+		2	8	7
		3	9	2	3
				1	1

c) $4,316 + 2,684$

		4	3	1	6
	+	2	6	8	4
		7	0	0	0
				1	1

4 Complete the calculations using column addition. Show your working.

a) $6,307 + 2,459 = \boxed{8,766}$

b) $3,185 + 5,070 = \boxed{8,255}$

5 Use the column method to complete the calculations.

a) Three thousand seven hundred and five plus two thousand and eighty-six

$$\boxed{5,791}$$

b) Five thousand three hundred and forty-five plus eight hundred and six

$$\boxed{6,151}$$

c) Seventeen thousand six hundred and two plus nine thousand eight hundred and fifty

$$\boxed{27,452}$$

6 Complete these calculations.

a)

		2	8	4	6
		4	5	0	3
	+	2	0	3	5
		9	3	8	4
		1		1	

b)

		2	1	3	6
		1	5	4	7
	+	3	2	3	5
		6	9	1	8
			1	1	

c)

		3	8	7	5
		4	5	8	8
	+	1	9	3	7
		1	0	4	0
		2	2	2	

7 a) Write these numbers in figures.

- four hundred and thirty thousand 430,000
- half a million 500,000
- two million and twenty-five thousand 2,025,000
- sixty-four thousand three hundred and fifty-four 64,354

b) Find the total of the numbers you wrote in part a).

3,019,354

c) Write the number that is four million greater than your total.

Give your answer in words and figures.

words seven million nineteen thousand three hundred and fifty-four.

figures 7,019,354

8 The table shows the number of people who visited a museum in one week.

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
651	873	512	840	1,019	2,643	2,188

a) How many people visited the museum at the weekend?
(Saturday and Sunday)

4,831

b) How many people visited the museum on weekdays?
(Monday to Friday)

3,895

c) How many people visited the museum altogether that week?
(Monday to Sunday)

8,726

9 Using the digits 1 to 9 exactly once in each calculation, fill the boxes to make a total as close to 1,000 as possible. *E.g.*

	1	5	2								
	3	7	8								
+	4	6	9					+			
	9 9 9										
	1 1										

Compare answers with a partner.