Multiply 4-Digits by 2-Digits

1a. Use all of the digit cards in the calculation below to make the closest possible number to 50,000.

3 1 2

□, 2 □ 1

x 2 □

PS

1b. Use all of the digit cards in the calculation below to make the closest possible number to 45,000.

0 4 2

2, 1 □ □

x □ 1

PS

2a. Jake has worked out the answer to 1,422 x 21 below.

		1	4	2	2
x				2	1
		1	4	2	2
	1	8	4	4	0
	1	9	8	6	2

Is Jake correct?
Explain your answer.

R

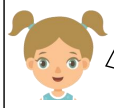
2b. Tina has worked out the answer to 3,102 x 32 below.

		3	1	0	2
x				3	2
		6	2	0	4
	9	3	3	6	0
	9	9	5	6	4

Is Tina correct?
Explain your answer.

R

3a. Kirsty says,



I can only use the digits 1, 2 or 3 in this calculation:

□,3□□

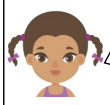
x □3

The result must have the digit 5 in it.

What could Kirsty's number be?
Find two possible numbers.

PS

3b. Chloe says,



I can only use the digits 1, 2 or 3 in this calculation:

□□□□

x □□

The result must have the digits 6 and 1 in it.

What could Chloe's number be?
Find two possible numbers.

PS

Multiply 4-Digits by 2-Digits

4a. Use all of the digit cards in the calculation below to make the closest possible number to 170,000.

3 1 9

7, □ □ 1

x 2 □

PS

4b. Use all of the digit cards in the calculation below to make the closest possible number to 28,000.

2 1 7

2, 3 □ □

x 1 □

PS

5a. Tom has worked out the answer to 2,475 x 31 below.

		2	4	7	5
x				3	1
		2	4	7	5
		7_{1}	4_{2}	2_{1}	5
		9	8	9	5

Is Tom correct?
Explain your answer.

R

5b. Julie has worked out the answer to 3,618 x 13 below.

		3	6	1	8
x				1	3
		9_{1}	8	5_{2}	4
	3	6	1	8	0
	4	5	0	3	4
	1	1	1		

Is Julie correct?
Explain your answer.

R

6a. Nina says,

I am thinking of a 4-digit number less than 2,000.
Only two of the digits in my number are greater than 3.
If I multiply my number by 13, I get an answer between 20,000 and 25,000.

What could Nina's number be?
Find two possible numbers.

PS

6b. Joe says,

I am thinking of a 4-digit number between 2,000 and 3,000.
Only one of the digits is greater than 3.
If I multiply my number by 14, I get an answer between 35,000 and 40,000.

What could Joe's number be?
Find two possible numbers.

PS

Multiply 4-Digits by 2-Digits

7a. Use all of the digit cards in the calculation below to make the closest possible number to 240,000.

7 6 4

□ □ 2 5 x 3 □

PS

7b. Use all of the digit cards in the calculation below to make the closest possible number to 260,000.

2 8 9

□ 2 □ 4 x □ 7

PS

8a. Philip has worked out the answer to 3,186 x 47 below.

		3	1	8	6
x				4	7
	2	2_{1}	3_{6}	0_{4}	2
1	2	7_{3}	2_{2}	4	0
1	4	9	5	4	2

Is Philip correct?
Explain your answer.

R

8b. Amy has worked out the answer to 8,527 x 65 below.

		8	5	2	7
x				6	5
	4	2_{2}	6_{1}	3_{3}	5
5	1_{3}	1_{1}	6_{4}	2	0
5	5	4	2	5	5
		1			

Is Amy correct?
Explain your answer.

R

9a. Paul says,

I am thinking of a 4-digit number between four thousand and five thousand.
The total of the digits in my number is nineteen.
If I multiply my number by fourteen, I get an answer between sixty-five thousand and seventy thousand.

What could Paul's number be?
Find two possible numbers.

PS

9b. David says,

I am thinking of a 4-digit number between three thousand and four thousand.
The total of the digits in my number is twenty.
If I multiply my number by twenty-six, I get an answer between ninety thousand and ninety-one thousand.

What could David's number be?
Find two possible numbers.

PS