



1)

- a) $5142 - 4085 = 1057$
- b) $9756 - 5873 = 3883$
- c) $8291 - 6534 = 1757$
- d) $7352 - 4867 = 2485$
- e) $5063 - 3258 = 1805$

2)

- a) $2371 - 1938 = 433 > 1287 - 1038 = 249$
- b) $5738 - 3474 = 2264 = 6246 - 3982 = 2264$
- c) $6084 - 2969 = 3115 < 7114 - 3998 = 3116$

- 3) $744 + 453 = 1197$
 $4573 - 1197 = 1805$

1)

- a) *The first calculation is wrong; the correct answer is 3645. The second and third are correct. The final calculation is wrong; the answer should be 1779.*
- b) *Where the digit in the top number (minuend) is smaller than the corresponding digit in the bottom number (subtrahend), he has just subtracted the smaller digit from the larger, instead of exchanging.*
- c) *If the digit in the top number (minuend) is smaller than the corresponding digit in the bottom number (subtrahend), he needs to exchange from the column to the left. For example, if he had to calculate 2 ones subtract 4 ones, he would need to exchange a ten from the tens column on the left. Then, he would have 12 ones and could subtract 4 ones. He must remember, when he comes to subtract the tens, that he will have 1 less ten now and he may, in some cases, need to exchange from the hundreds column.*
- d) *He is wrong. There may be subtraction calculations where only one exchange is necessary. However, depending on the size of the digits in each column, it may be necessary to have more than one exchange. It may even be necessary to have exchanges in three consecutive columns when subtracting a 4-digit number from a 4-digit number. For example, $5463 - 4585$ would require three exchanges.*



- 1) $5514 - 4562 = 952$ - 3-digit number
 $5534 - 4562 = 972$ - 3-digit number
 $5554 - 4562 = 992$ - 3-digit number
 $5574 - 4562 = 1012$ - 1 is repeated.
 $5594 - 4562 = 1032$
 The combination is 1032.

- 2) *Children use trial and error and place value knowledge to try to reach an answer close to 2000. A possible answer could be $6235 - 4198 = 2037$.*

