

1) Patrick has forgotten to include the two tens that he exchanged from the ones column. The answer to the calculation should be 144.



- 2) Will is correct because 44 is too small to be the answer to 56 × 4 as this is less than the starting number before the multiplication. Marina has incorrectly multiplied 50 by 4. The answer to this part of the calculation should be 200. The final answer should be 224.
- 3) Will is correct. The smallest possibility for a 2-digit by 1-digit calculation is 10 × 1 = 10, which has a 2-digit answer. The largest possible calculation is 99 × 9 = 891, which has three digits.
 - a) 59 × 8 = 472
 - b) $35 \times 4 = 140, 35 \times 8 = 280, 26 \times 5 = 130$
 - c) 26 × 8 = 208, 47 × 5 = 235, 59 × 4 = 236 or 35 × 8 = 280, 59 × 5 = 295
- There are many possible answers with zero in the ones column, e.g. 40 × 2 = 80, 30 × 3 = 90 Other possible answers may include 13 × 2 = 26, 21 × 2 = 42, 31 × 2 = 62 or 33 × 2 = 66
- 2) There are 12 possible calculations.

Does Not Require Exchange	Requires Exchange
22 × 2 = 44	17 × 2 = 34
43 × 2 = 86	37 × 2 = 74
22 × 4 = 88	17 × 4 = 68
	37 × 4 = 148
	43 × 4 = 172
	17 × 5 = 85
	$22 \times 5 = 110$
	37 × 5 = 185
	43 × 5 = 215



