

Question	Answer
1	<p>a) 27 57 The sequence is increasing by 10</p> <p>b) 119 129 159 The sequence is increasing by 10</p> <p>c) 575 775 975 1,075 The sequence is increasing by 100</p> <p>d) 7,300 10,300 11,300 12,300 The sequence is increasing by 1,000</p> <p>e) 6,290 6,260 6,250 6,240 The sequence is decreasing by 10</p>
2	<p>a) 4 14 24 34 44 54</p> <p>b) 4 104 204 304 404 504</p> <p>c) 4 1,004 2,004 3,004 4,004 5,004</p> <p>d) Many possible answers, e.g: They all have the same starting term 4 Every term in all of the sequences will end with 4 The second term in each sequence has a 1 in it, but the value of the 1 is different in each sequence Each sequence increases by different amounts. etc.</p>
3	<p>9,150 6,050 155,250</p> <p>Since the sequence is increasing by 100 from term to term, the tens and ones digits will always remain the same (50). Any values in the other columns are possible. any numbers that have 5 in the tens column and 0 in the ones column, e.g. 450 19,950</p>
4	<p>a) 234,650</p> <p>b) The green counter moves right.</p> <p>c) The purple counter moves left.</p> <p>d) The counter moves down to the beginning of the next row e.g. $9 + 1 = 10$, $90 + 10 = 100$ etc.</p>
5	

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5	Number	10 more	100 more	1,000 more	10,000 more	100,000 more
	25	35	125	1,025	10,025	100,025
	250	260	350	1,250	10,250	100,250
	2,500	2,510	2,600	3,500	12,500	102,500
	25,000	25,010	25,100	26,000	35,000	125,000
	250,000	250,010	250,100	251,000	260,000	350,000
	<p>Many possible answers e.g.:</p> <p>For 25, the tens and ones column always remain as 25 except in 35</p> <p>The sum of the digits inputted is 7, but the sum of the digits in the answers is 8 etc.</p>					
6	<p>If Brett adds both counters to the same column, he could make: 413,850 233,850 215,850 213,870 213,852</p> <p>There are many more possible solutions if he adds the counters to different columns e.g.:</p> <p>323,850 213,951 etc.</p> <p>He can't add both counters to the hundreds column because then he would have to exchange the 10 hundreds for 1 thousand.</p>					