

Q6. Which of the following numbers is a valid ISBN? Here, ISBN means the International Standard Book Number which is used to identify books, publishers, and bookstores. It consists of exactly 10 digits, and the rightmost digit is used for a check digit. The check digit is validated by using modulo 11 as follows:

- Multiply each digit from the first (leftmost) to the ninth by a weight from 10 to 2 respectively; the first digit is multiplied by 10, the second by 9, and so on.
- Calculate the sum of each product, and then add the check digit.
- Divide the resulting value by 11.
- If the resulting remainder is zero (0), the check digit is valid. Otherwise, it is invalid.

For example, in case of ISBN 0003194876, the check digit is validated as follows:

First 9 digits:	0	0	0	3	1	9	4	8	7	
Weight from 10 to 2:	10	9	8	7	6	5	4	3	2	
Each product and sum:	0	0	0	21	6	45	16	24	14	= 126
Add check digit:	6									
Total:	132									

The remainder of the division of 132 by 11 is 0, so this ISBN is valid.

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| a) 0071361283 | b) 0071361284 |
| c) 0071361285 | d) 0071361286 |