Listener Crossword No 111: Mathematical

1	2		3		4	5	6		7
8					9				
10		11		12			13	14	
		15				16			
17	18				19				20
	21			22				23	
24		25					26		
27						28			29
		30			31				
32	33				34			35	
36									

No number can begin with 0.
[The unchecked digit in 29 Down is 0; 11 Down requires some licence.]

ACROSS

1. 4th power
3. 20th power
8. Prime number
9. Multiple of 13
10. Square
13. Sum of number of possible moves of a knight from all squares of a chess board
15. Square
17. Square
19. Square
21. Product of two prime numbers
22. Square
23. Prime number
24. Square
26. Square
27. One less than a square
28. Cube
30. Cube
32. Twice a prime number
34. A factorial (*i.e.,* product of all numbers from 1 to a given number inclusive)
36. Number of seconds in the nineteenth century

DOWN

1. 5th power
2. Square
3. Square
4. Square
5. Prime number
6. Square
7. Square
11. Generally denoted by a Greek letter
12. Product of two consecutive even numbers
14. Square
16. Multiple of 37
18. Product of four consecutive numbers
20. Prime number
22. Multiple of 3
24. Multiple of three consecutive odd numbers
25. Square
26. Multiple of 64
28. Multiple of 3
29. Telephone number familiar to listeners
31. Prime number
33. Prime number greater than 70
35. Product of two consecutive numbers