

## Sequence Challenge

*Virginia Mathematics Teacher* Fall 1984

Find the pattern and name the next three elements in the sequence.

1. 1, 2, 3, 5, 8, ...
2. 3, 1, 4, 1, 5, ...
3. 1, 3, 6, 10, 15, 21, ...
4. 2, 3, 5, 7, 11, 13, ...
5. 1010, 1011, 1100, 1101, 1110, 1111, ...
  
6. 1, 2, 6, 24, 120, 720, ...
7. 1, 5, 14, 30, 55, 91, ...
8. 1, 2, 10, 11, 12, 20, ...
9. 1, 3, 7, 15, 31, 63, ...
10. 2, 7, 1, 8, 2, 8, ...
  
11. .01, .05, .1, .25, .5, 1, ...
12. 2, 3, 5, 6, 7, 8, 10, ...
13. 1, 4, 6, 8, 9, 10, ...
14. 1, 2, 2, 3, 2, 4, 2, , ...
15. 1, 4, 9, 61, 52, 63, ...
  
16. 12, 30, 24, 30, 36, 40, ...
17. 15, 20, 20, 6, 6, 19, 19, ...
18. 12, 1, 1, 1, 2, 1, ...
19. 12, 13, 14, 15, 20, 22, ...
20. 1, 5, 12, 22, 35, 51, ...
  
21. 31, 59, 90, 120, 151, 181, ...
22. 3, 3, 5, 4, 4, 3, 5, ...
23. 1, 2, 3, 5, 8, 4, 3, 7, ...
24. 1, 4, 7, 11, 14, 17, 41, 44, ...
25. 11, 31, 71, 91, 32, 92, ...
  
26. 8, 5, 4, 9, 1, 7, 6, ...
27. 1, 8, 11, 69, 101, 181, 609, ...
28. 4, 6, 8, 9, 10, 14, 16, 18, ...
29. 14, 19, 29, 40, 44, 52, 59, ...
30. 1, 2, 6, 10, 4, 5, 9, 3, ...