

**a****Answer Section**

11. Multiply by 2; 64, 128, 256.
12. Multiply by 2; 32, 64, 128.
13.  $a_n = a_{n-1} + 5$ , where  $a_1 = 8$ ; 33
14. 12 feet
15. yes, 7
16. 120 cartons
17.  $a_n = 2n + 6$ ; 34
18. 27
19. 111 baskets
20.  $a_n = -2 \cdot (3)^{n-1}$ ; -162
21.  $a_n = 3 \cdot (-3)^{n-1}$ ; 243
22. yes, 3
23. 204
24. 270
25. 28
26. four students; simple
27. 20 students; stratified
28. 10 strawberries; convenience
29. a group of cars; systematic
30. bags of popcorn; systematic
31. group of country radio station listeners; voluntary
32. five students; voluntary
33. 68%
34.  $\pm 3\%$
35. B
36. 2
37. -4.9
38. 1600
39. 49.4 and 62.6
40. 16%