**Answer to Self- Assessment problem 5**

|  | **Sign-Magnitude** | **1's Complement** | **2's Complement** |
| --- | --- | --- | --- |
| 0 | 0 000 0000(+0) or 1 000 0000(–0) | 0 000 0000(+0) or 1 111 1111(–0) | 0 000 0000 |
| 5 | 0 000 0101 | 0 000 0101 | 0 000 0101 |
|  |  | positive 1's and 2's complement numbers are  sign-magnitude | |
| –5 | 1 000 0101 | 1 111 1010 | 1 111 1011 |
| 17 | 0 001 0001 | 0 001 0001 | 0 001 0001 |
| –33 | 1 010 0001 | 1 101 1110 | 1 101 1111 |