| Binary String | Unsigned (positional) Interpretation | Sign Magnitude Interpretation | One's Complement Interpretation | Two's Complement Interpretation |
|---|---|---|---|---|
| 0000 | 0 | 0 | 0 | 0 |
| 0001 | 1 | 1 | 1 | 1 |
| 0010 | 2 | 2 | 2 | 2 |
| 0011 | 3 | 3 | 3 | 3 |
| 0100 | 4 | 4 | 4 | 4 |
| 0101 | 5 | 5 | 5 | 5 |
| 0110 | 6 | 6 | 6 | 6 |
| 0111 | 7 | 7 | 7 | 7 |
| 1000 | 8 | −0 | −7 | −8 |
| 1001 | 9 | −1 | −6 | −7 |
| 1010 | 10 | −2 | −5 | −6 |
| 1011 | 11 | −3 | −4 | −5 |
| 1100 | 12 | −4 | −3 | −4 |
| 1101 | 13 | −5 | −2 | −3 |
| 1110 | 14 | −6 | −1 | −2 |
| 1111 | 15 | −7 | −0 | −1 |

**Figure 3.9** The decimal value assigned to each combination of four bits when using unsigned, sign-magnitude, one's complement, and two's complement interpretations.