# **Solutions**

#### 0. Convert these octal numbers to decimal

- 1.302 -> 194
- 2.632 -> 410
- 3. 235 -> 157
- 4. 654 -> 428
- 5. 162 -> 114

#### 1. Convert these decimal numbers to octal

- 1. 90 -> 132
- 2.307 -> 463
- 3.260 -> 404
- 4. 491 -> 753
- 5. 169 -> 251

# 2. Find the 8's complement of these octal numbers

- 1.35 = 43
- 2.624 = 154
- 3.103 = 675
- 4.322 = 456
- 5.346 = 432

### 3. Find the 7's complement of these octal numbers

- 1.657 = 120
- 2.232 = 545
- 3.307 = 470
- 4.425 = 352
- 5.612 = 165

# 4. Convert these octal numbers to binary

- 1. 473 -> 100111011
- 2. 500 -> 101000000
- 3. 443 -> 100100011
- 4. 173 -> 1111011
- 5. 313 -> 11001011

# 5. Convert these binary numbers to octal

- $1.\ 100101010 \rightarrow 452$
- $2.100000 \rightarrow 40$
- 3.111011010 -> 732
- $4.111110100 \rightarrow 764$
- 5. 110001000 -> 610

#### 6. Convert these hexadecimal numbers to octal

- 2.8e = 216
- 3.1a7 = 647
- 4.182 = 602
- 5.1b1 = 661

#### 7. Convert these octal numbers to hexadecimal

- 1.43 = 23
- 2.525 = 155
- 3.162 = 72
- 4.624 = 194
- 5.424 = 114

# 8. Find the 16's complement of these hexadecimal numbers

- 1. e0e
- 2.4
- 3. e85
- 4. 3e
- 5. e3c

# 9. Find the 15's complement of these hexadecimal numbers

- 1. e4c
- 2. ed3
- 3. 7
- 4.7e
- 5. efa

# 10. Convert these hexadecimal numbers to binary

- 1.4f = 1001111
- 2. aa = 10101010
- 3.77 = 1110111
- 4.134 = 100110100
- 5.13f = 100111111

# 11. Convert these binary numbers to hexadecimal

- 1.101010101 = 155
- 2.111010011 = 1d3
- $3.\ 101000101 = 145$
- 4.110111111 = df
- 5.100011100 = 11c