

Converting Binary (base 2) to Denary (base 10)

1. 1010
2. 1110
3. 1010 1010
4. 1011 1101
5. 1111 1111
6. 0111 1010

Converting Denary (base 10) to Binary (base 2)

1. 16
2. 39
3. 63
4. 169
5. 211
6. 254

Converting Binary (base 2) to Hexadecimal (base 16)

1. 1011
2. 1011 1011
3. 0110 1010
4. 1111 1011
5. 110100
6. 11011

Converting Hexadecimal to Binary and hence to Denary

1. 6D
2. A7
3. 17
4. FE
5. C0
6. 63

Adding Binary Numbers

Convert the following numbers to binary and add them – show your working.

1. $23 + 45$

2. $62 + 127$

3. $212 + 36$

Adding Binary Numbers

Convert the following numbers to binary and add them – show your working.

4. $92 + 76$

5. $115 + 136$

6. $19 + 236$

Negative Binary Numbers

Convert the following numbers to binary, using the 2s complement method.

1. -4

2. -61

3. -127

4. -128

5. -47

6. 46

Subtracting Binary Numbers

Convert the following numbers to binary and subtract them – show your working.

1. $45 - 23$

2. $127 - 62$

3. $67 - 36$

Adding Binary Numbers

Convert the following numbers to binary and add them – show your working.

4. $92 - 76$

5. $115 - 126$

6. $19 - 67$