

Complete the following conversions between number systems. Note that there are 12 different types of conversions represented below and that these 12 types are all that you will need to know. Consider each case carefully to determine which algorithm should be used to complete the conversion.

1. Convert the binary number 1011011 to decimal.
2. Convert the octal number 743 to decimal.
3. Convert the hexadecimal number A6F to decimal.
4. Convert the binary number 100010101111 to hexadecimal.
5. Convert the octal number 172 to hexadecimal.
6. Convert the decimal number 3721 to hexadecimal.
7. Convert the binary number 111011001 to octal.
8. Convert the decimal number 955 to octal.
9. Convert the hexadecimal number CD8 to octal.
10. Convert the octal number 561 to binary.
11. Convert the decimal number 1073 to binary.
12. Convert the hexadecimal number E4C to binary.