

Worksheet A21.1

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Base Conversions

1. Convert $101\ 011\ 111_2$ to 357₈
2. Convert $1101\ 0100\ 1010_2$ to D4A₁₆
3. Convert $2AE_{16}$ to 686₁₀
4. Convert 100101_2 to 37₁₀
5. Convert 3627_8 to 1111001011₂
6. Convert $F12E_{16}$ to 1111000100010110
7. Convert 42235_8 to 17,565₁₀
8. Convert FFE_{16} to 4094₁₀
9. Convert 624 to 1001110000
10. Convert 4481 to 10,601₈
11. Convert 3719 to E87₁₆
12. Add the two binary numbers 0000 0000 0001 1011 and 0000 0000 0001 0101 together and convert the sum back to base 10.

$$\begin{array}{r}
 0000\ 0000\ 0001\ 1011 \\
 +\ 0000\ 0000\ 0001\ 0101 \\
 \hline
 0000\ 0000\ 0010\ 1110 \\
 \hline
 0110110
 \end{array}$$

$$0110110_2 \rightarrow 54_{10}$$