Number Systems Worksheet (Unsigned Integer)

Convert the following numbers from their specified base to the bases specified in the blank lines. Be sure to show your work on scrap paper (use of a calculator is only permissible in regards to checking your work if needed). The column with base \*\*, I am allowing you to come up with your own base for creativity ( base should not be 2, 8, or 16, and larger than 1 and no bigger than 62; or each problem, it does not have to always be the same base, mix them up for good practice )

1) 24­10 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

2) 124­10 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

3) 2460­10 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

4) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10 = \_\_\_\_\_\_1001102 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

5) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10 = \_\_\_\_100110112 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

6) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10 = \_11110011012 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

7) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10 = \_\_\_\_\_\_\_\_\_\_\_2 = \_\_\_\_\_\_\_\_\_\_\_\_7128 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

8) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10 = \_\_\_\_\_\_\_\_\_\_\_2 = \_\_\_\_\_\_\_\_\_\_554318 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

9) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10 = \_\_\_\_\_\_\_\_\_\_\_2 = \_\_\_\_\_\_\_\_\_7711008 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

10) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10 = \_\_\_\_\_\_\_\_\_\_\_2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8 = \_\_\_\_\_\_\_\_\_\_\_\_\_FA16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

10) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10 = \_\_\_\_\_\_\_\_\_\_\_2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8 = \_\_\_\_\_\_\_\_\_\_\_21FA16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

10) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10 = \_\_\_\_\_\_\_\_\_\_\_2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8 = \_\_\_\_\_\_\_\_\_\_443FC16 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*