

Name _____

Base 7 Arithmetic

In Base 7 there are exactly 7 digits: 0, 1, 2, 4, 5, 6. If we add one more to 6 we get 10_{seven} . Continuing on, we would have 11_{seven} , 12_{seven} , 13_{seven} , \dots , 16_{seven} and 20_{seven} .

Compute the following:

1.
$$\begin{array}{r} 34_{seven} \\ + 44_{seven} \\ \hline \end{array}$$

2.
$$\begin{array}{r} 613_{seven} \\ + 144_{seven} \\ \hline \end{array}$$

3.
$$\begin{array}{r} 613_{seven} \\ - 144_{seven} \\ \hline \end{array}$$

4.
$$\begin{array}{r} 14_{seven} \\ \times 23_{seven} \\ \hline \end{array}$$

5.
$$\begin{array}{r} 642_{seven} \\ \times 5_{seven} \\ \hline \end{array}$$