Problem 1. In the following multiplication problem, A, B, C, D, E are different one-digit numbers. Determine their values.

\[
\begin{array}{cccc}
A & B & C & D & E \\
\times & 4 & \\
\end{array}
\]

\[
\begin{array}{cccc}
E & D & C & B & A \\
\end{array}
\]

Problem 2. Shown below is the densest possible packing of 13 circles into a square (they all touch each other). If the radius of a circle is 1, find the side length of the square.

Problem 3. Five different numbers are given. By computing all of the different sums of 2 numbers, we get the list \{8,11,13,14,15,16,18,19,21\} where, possibly, some of the numbers in the list have occurred more than once. Find the 5 numbers.