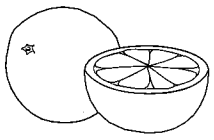
NS5-40: Long Division — 2-Digit by 1-Digit

Manuel is preparing snacks for 4 classes.
He needs to divide 97 oranges into 4 groups.
He will use long division and a model to solve the problem:



Step 1:

$4\overline{)97}$ ← He writes the number of oranges here.

He writes the number of groups he needs to make here. →

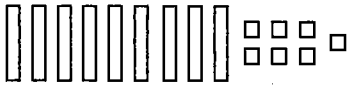
He puts 2 tens blocks in each group. →

$4\overline{)\begin{array}{|c|c|}\hline 2 & \\ \hline 9 & 7 \\ \hline \end{array}}$ ← There are 7 ones.

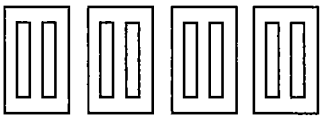
There are 9 tens blocks in the model.

Manuel makes a base ten model of the problem:

97 = 9 tens + 7 ones



Manuel can divide 8 of the 9 tens blocks into 4 equal groups of size 2:



1. Manuel has written a division statement to solve a problem.
   How many groups does he want to make?
   How many tens and how many ones would he need to model the problem?

a) $3\overline{)76}$

groups _____

tens blocks _____

ones _____

b) $4\overline{)95}$

groups _____

tens blocks _____

ones _____

c) $4\overline{)92}$

groups _____

tens blocks _____

ones _____

d) $5\overline{)86}$

groups _____

tens blocks _____

ones _____

2. How many tens blocks can be put in each group?

a) $3\overline{)\begin{array}{|c|c|}\hline 1 & \\ \hline 4 & 5 \\ \hline \end{array}}$

b) $5\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 9 & 3 \\ \hline \end{array}}$

c) $4\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 6 & 2 \\ \hline \end{array}}$

d) $3\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 8 & 9 \\ \hline \end{array}}$

e) $4\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 8 & 2 \\ \hline \end{array}}$

f) $3\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 3 & 8 \\ \hline \end{array}}$

g) $5\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 9 & 7 \\ \hline \end{array}}$

h) $4\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 8 & 1 \\ \hline \end{array}}$

i) $6\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 8 & 5 \\ \hline \end{array}}$

j) $7\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 9 & 6 \\ \hline \end{array}}$

3. For each division statement, how many groups have been made?
   How many tens are in each group?

a) $3\overline{)\begin{array}{|c|c|}\hline 2 & \\ \hline 8 & 5 \\ \hline \end{array}}$

groups 3

number of tens in each group 2

b) $4\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 9 & 4 \\ \hline \end{array}}$

groups _____

number of tens in each group _____

c) $5\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 7 & 5 \\ \hline \end{array}}$

groups _____

number of tens in each group _____

d) $2\overline{)\begin{array}{|c|c|}\hline \square & \\ \hline 8 & 9 \\ \hline \end{array}}$

groups _____

number of tens in each group _____