## LI: I am dearning to find the rules in sequences.

1) Write the rule for these sequences and the next three numbers in the sequence.
a) $2,5,8,11$
b) $5,9,13,17$
c) $1,6,11,16$
d) $7,13,19,25$
2) Here is part of a number sequence.

The numbers in the sequence increase by 25 each time.
$5075100125 \ldots$
Circle all of the numbers below that will appear in the sequence. 255650735900995
3) The numbers in this sequence increase by 14 each time.

Write the missing numbers.
? 8296 ? 124138 ?
4) The rule for this sequence of numbers is 'add 3 each time'.

$$
147101316 \ldots
$$

The sequence continues in the same way.
Mary says,
'No matter how far you go there will never be a multiple of 3 in the sequence'.
Is she correct? Explain why?
The numbers in this sequence increase by 3 each time.

$$
\begin{array}{llll}
3 & 6 & 9 & 12
\end{array}
$$

The numbers in this sequence increase by 5 each time.

$$
\begin{array}{lllll}
5 & 10 & 15 & 20 & \ldots
\end{array}
$$

Both sequences continue.

Write a number greater than 100 which will be in both sequences.

