Whitney is working out $49 \div 4$ using a place value chart.

<table>
<thead>
<tr>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

- **a)** Talk about Whitney's method with a partner.
- **b)** Why is there one counter left over?
  
  **It is a remainder**

- **c)** Complete the division.
  
  $49 \div 4 = \underline{12} \text{ r } 1$

- **d)** Use place value counters to complete the divisions.
  
  $50 \div 4 = \underline{12} \text{ r } 2$
  
  $51 \div 4 = \underline{12} \text{ r } 3$

What do you notice?
4 Dora has been working out some divisions.

\[
\begin{align*}
72 \div 4 &= 18 \\
73 \div 4 &= 18 \text{ r}1 \\
74 \div 4 &= 18 \text{ r}2 \\
75 \div 4 &= 18 \text{ r}3
\end{align*}
\]

I know without working it out that 76 \div 4 must be 18 \text{ r}4

a) Why does Dora think this?

She has spotted a pattern.

b) Explain why Dora is wrong.

You can’t have a remainder of 4 when dividing by 4.

5 Eggs come in boxes of 6
Annie has 75 eggs.
She wants to know how many boxes she can fill.

a) Complete the division to work it out.

\[75 \div 6 = 12 \text{ r}3\]

b) What does the remainder represent?
Talk about it with a partner.

c) Complete the sentence.
Annie can fill \boxed{12} boxes with \boxed{3} eggs left over.

6 Jack has these bulbs.

Equal numbers of each bulb are put into 4 tubs.
How many of each bulb will be in each tub?

\[
\begin{align*}
\text{Daffodils} & \quad 49 \\
\text{Tulips} & \quad 63 \\
\text{Crocuses} & \quad 98
\end{align*}
\]

Daffodils \boxed{12} Tulips \boxed{15} Crocuses \boxed{24}

How many of each bulb will be left over?

Daffodils \boxed{1} Tulips \boxed{3} Crocuses \boxed{2}

How many tubs could Jack use so that there are no bulbs left over?