On the Farm

Farmer Mathman wants to redesign his farm. The table lists the number of each type of animal he has. He needs to build pens for each type of animal. Each animal gets one square unit in a pen. Farmer Mathman only likes rectangular pens. Help Farmer Mathman design pens for his farm. Use the table below to help guide you. Draw your answers on grid paper.

<table>
<thead>
<tr>
<th>Animals on Farmer Mathman’s Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal</td>
</tr>
<tr>
<td>Number</td>
</tr>
</tbody>
</table>

1. How many ways can Farmer Mathman make a pen for the chickens? Draw all the possible rectangular pens on grid paper.

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2. Farmer Mathman has 16 units of fencing to make a pen for the cows. Draw all the possible ways he can design the cow pen on grid paper, using all the fencing.

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3. Draw all the possible pens he can build for the horses on grid paper. Which pen would use the least amount of fencing?

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4. Can he build a square pen for any of the animals? If so, which type of animal or animals?

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