These Place Value Cards allow children to connect the value of each digit to the number. The small numbers in the upper left-hand corners of the cards shows the expanded notation to remind children that the "3" is really worth a "30." The back of each card shows the MathRack's (aka Rekenrek) visual representation of each number, to help children build spatial relationships for numbers. A set contains one card each of the numbers 1-9, the tens (10, 20, 30...), the hundreds (100-900), and a 1000 card. This allows children to make all the numbers from 1 to 1999. Dimensions when you cut the cards should be: 3x2" for 1-9, 3x4" for 10-90, 3x6" for 100-900, and 3x8" for the 1000 card.

This document is designed to print the MathRack picture on the back of each numeral card. The cards can be used without the MathRack products, but I highly recommend the MathRack tools as an additional way to reinforce place value ideas. You can use the Place Value Cards in lots of activities, but the general idea is to have the children build numbers and discuss the "hidden value" of the digits. Below are directions for one lesson using the Place Value Cards along with the MathRack tools. You can adjust the lesson if you do not have them, or look for our free download titled "How to Build Your Own Rekenrek (MathRack) and Suggested Activities" on TeachersPayTeacers.com.

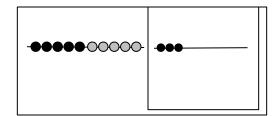
## **Using the Cards:**

Have a child build 13 using the MathRack 10 Rows of 10 or the Add-A-Row. Ask the class to write that number down. Next, ask them to show that number using the place value cards (example below). Once they have their cards put together, have them flip the cards over to see the MathRack representation on the back. Is the picture on the back the same as their MathRack? Teacher suggestion: Because you can only see the MathRack picture of the ten when you flip the cards over, pair up the children and have one of them show the number with their place value cards and the other show the picture.

Front Side

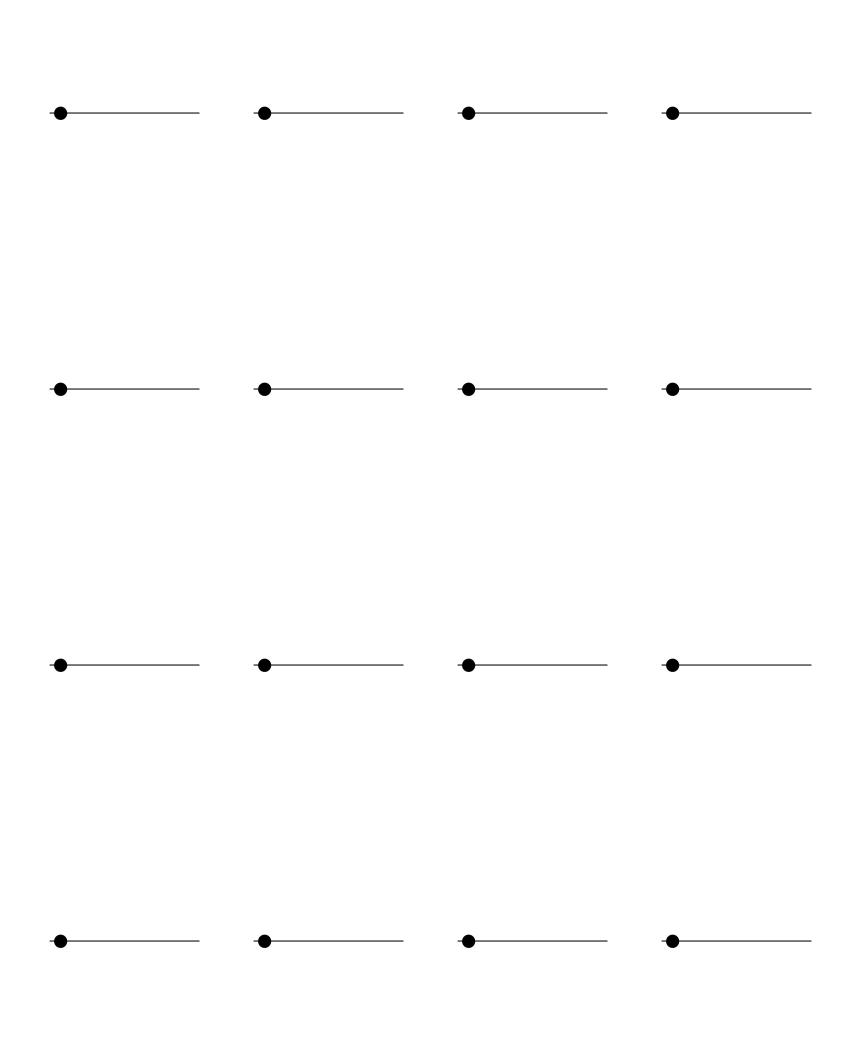
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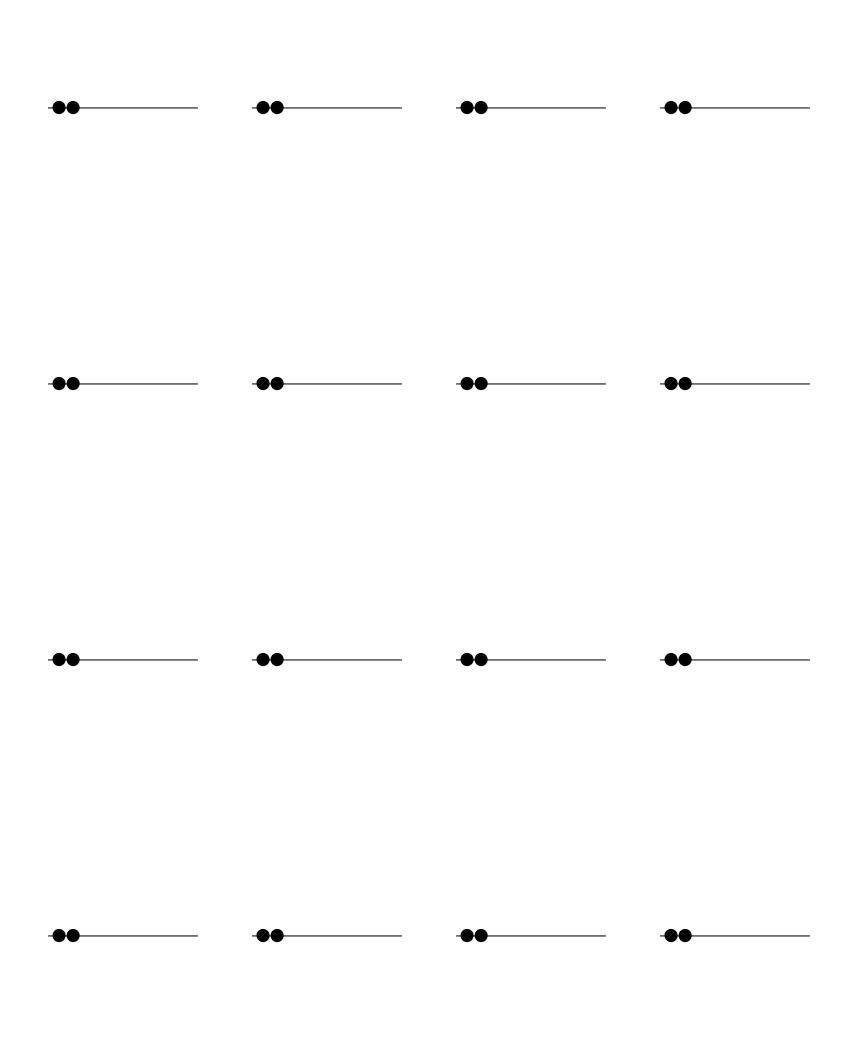
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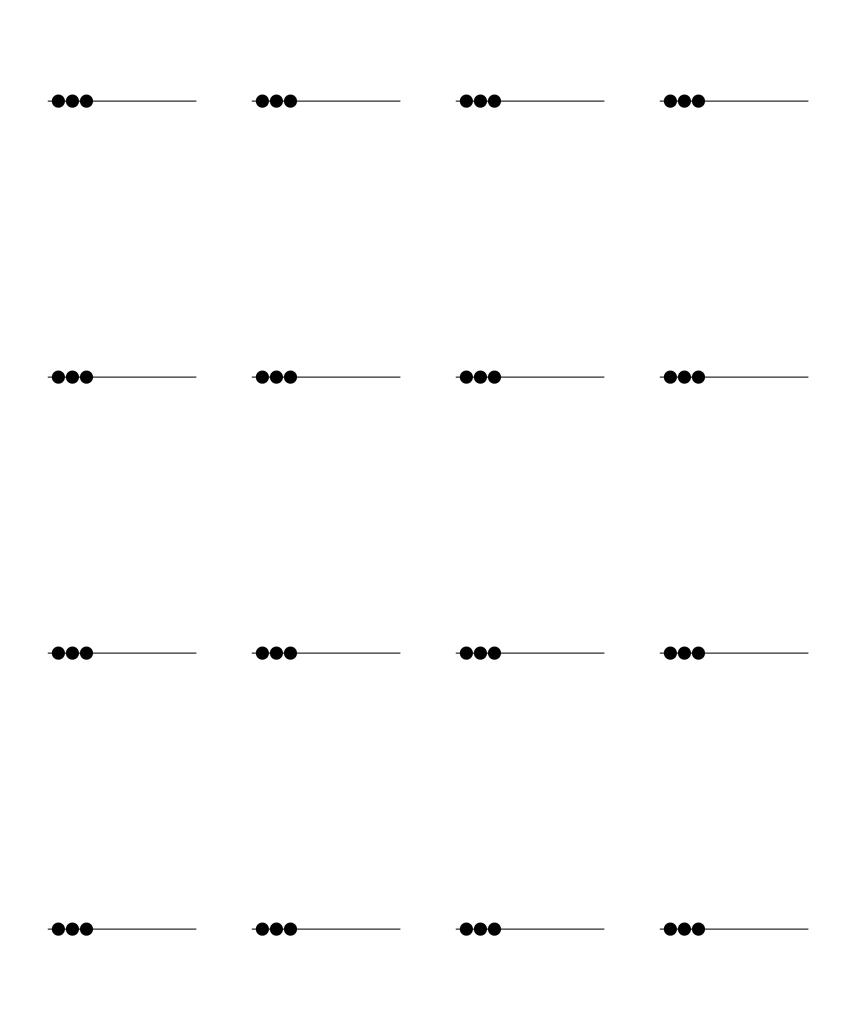


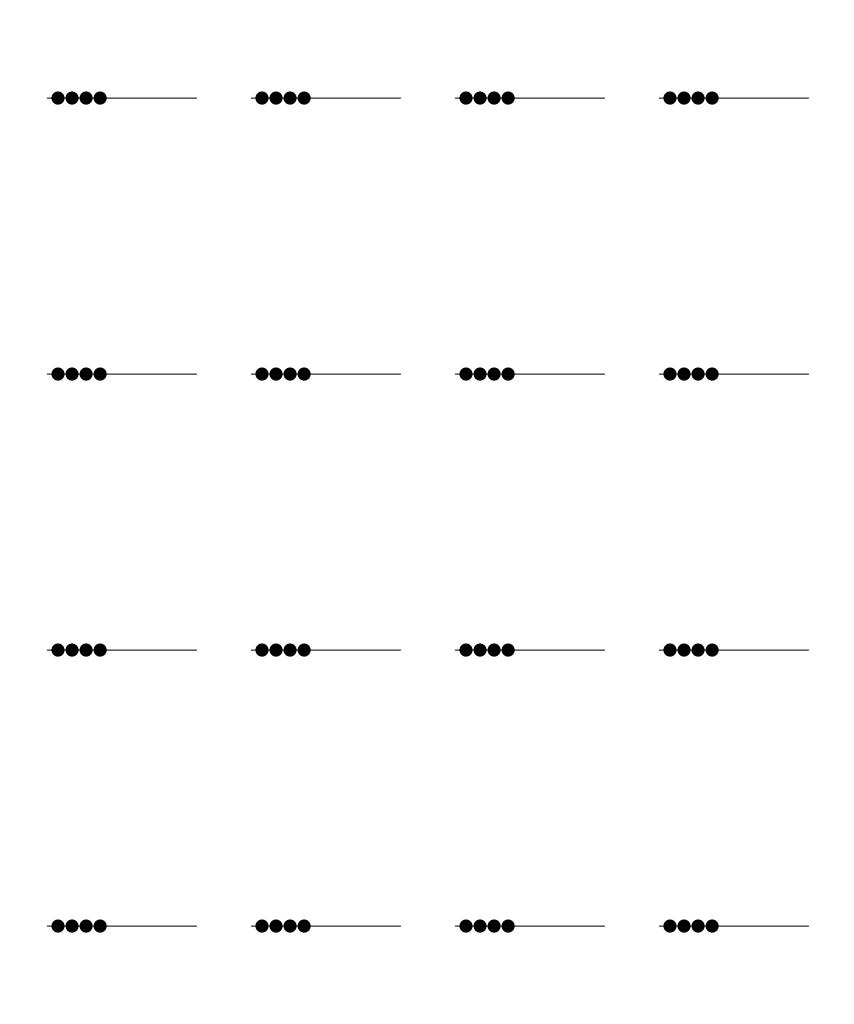
- As a group, come to a consensus about how to show 13 with the place value cards (10 and a 3). Talk about what is hiding when we put the cards like that (the 10 is there but it is hidden behind the 3) and the same thing happens when we write the number 13, it really is a 10 and 3. Write the problem as an equation also; 13 = 10 + 3
- Do more numbers (11-100) with them, always having them show it on the MathRack, writing the numeral, and then showing it with the place value cards to check their understanding of the written numeral.

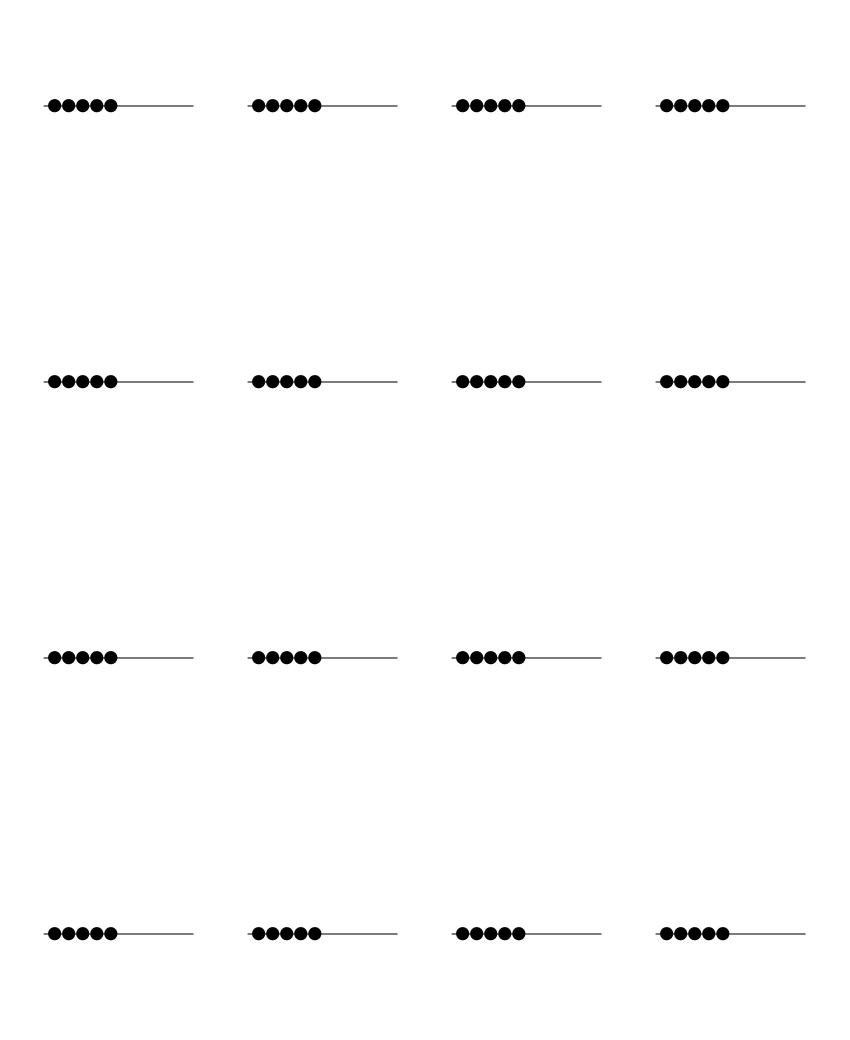
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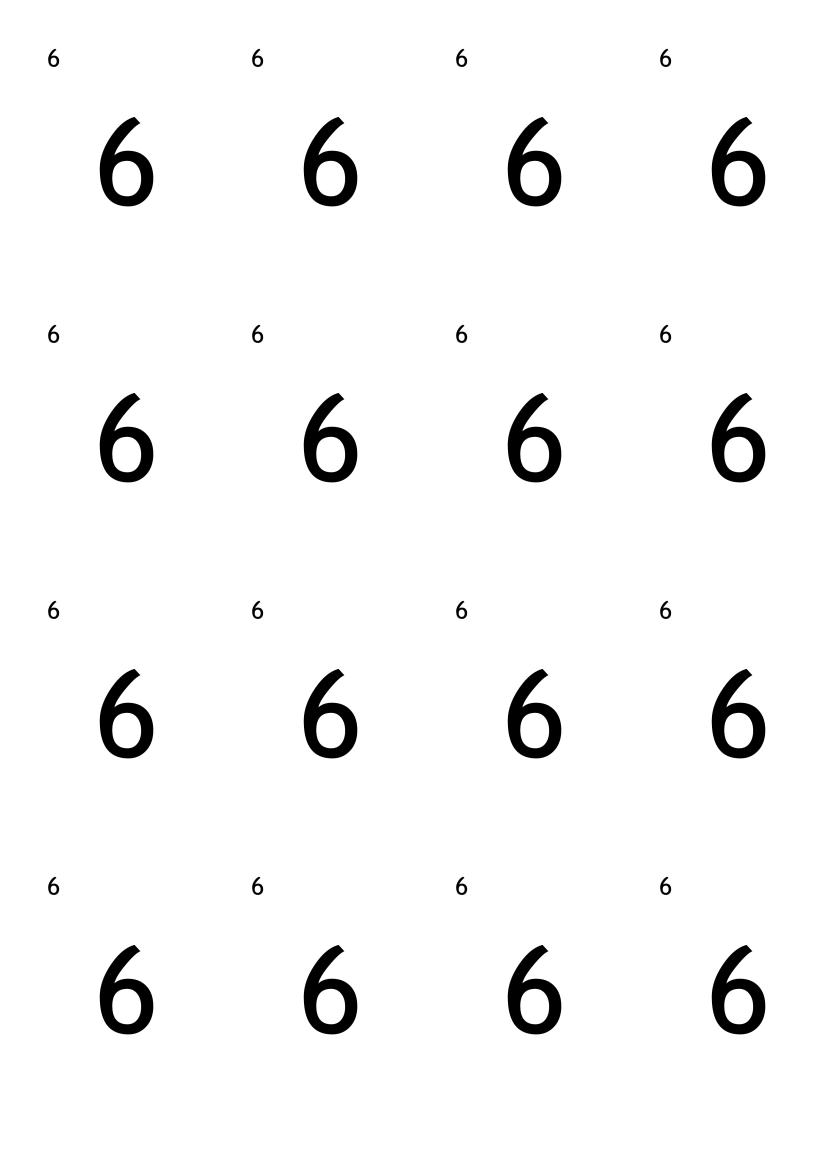


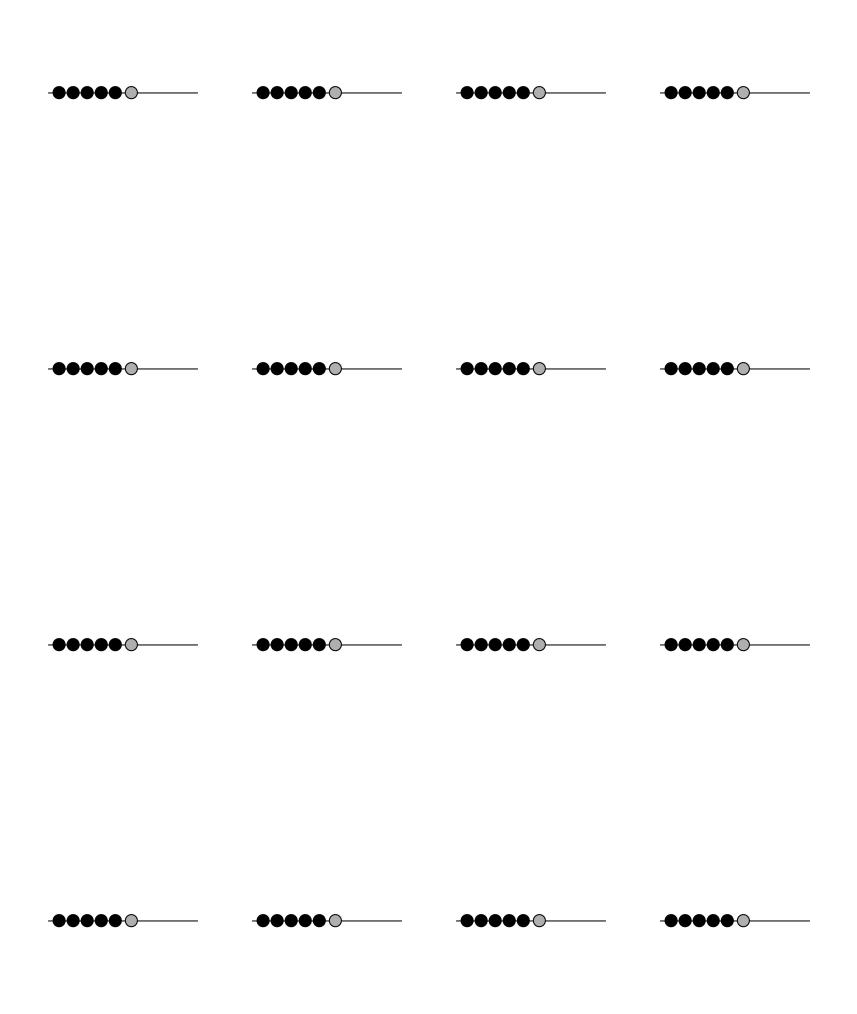


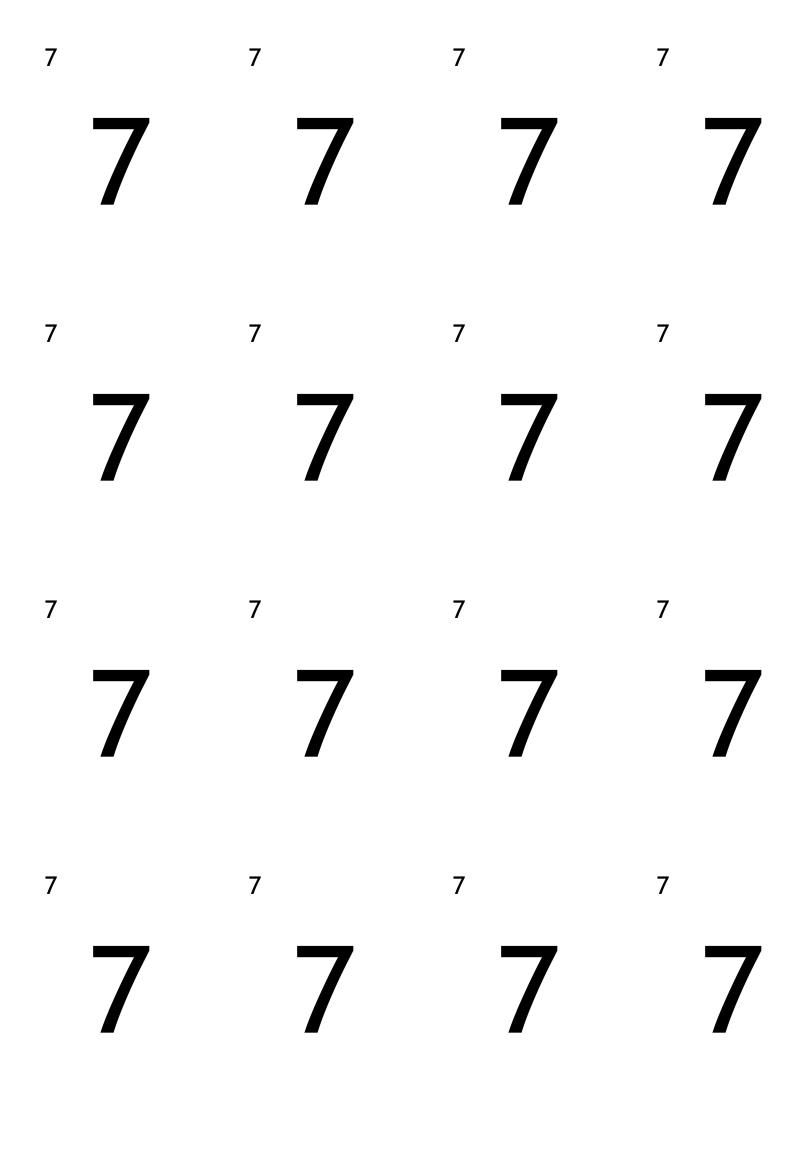


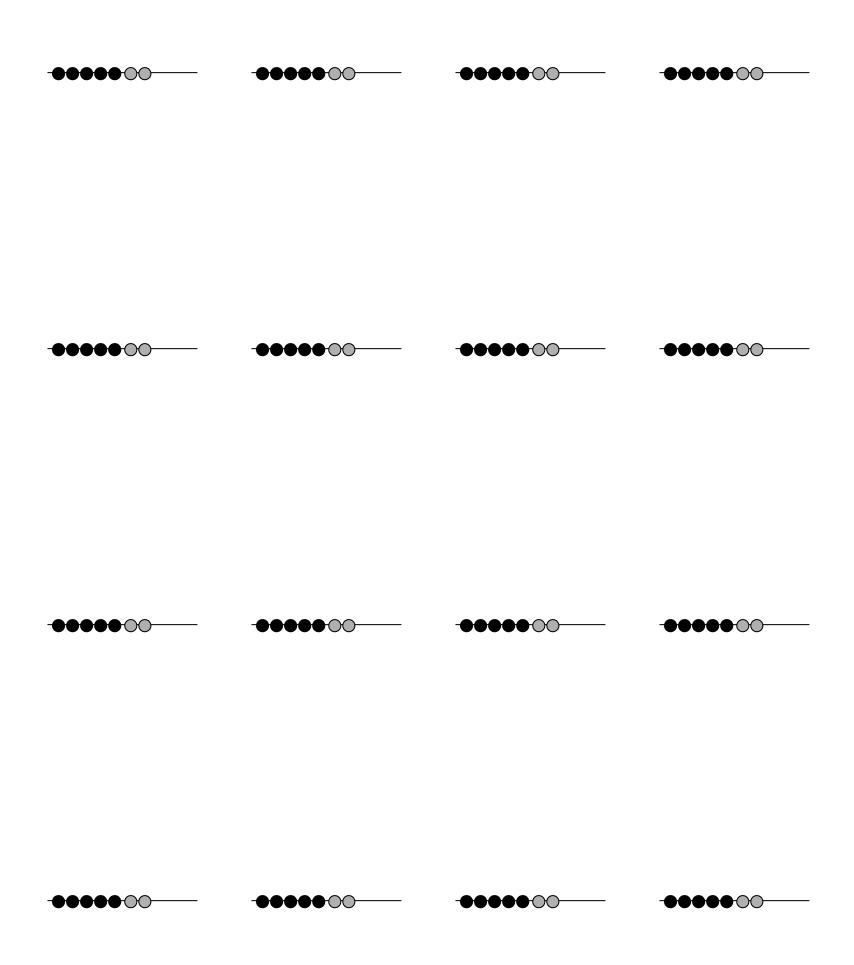


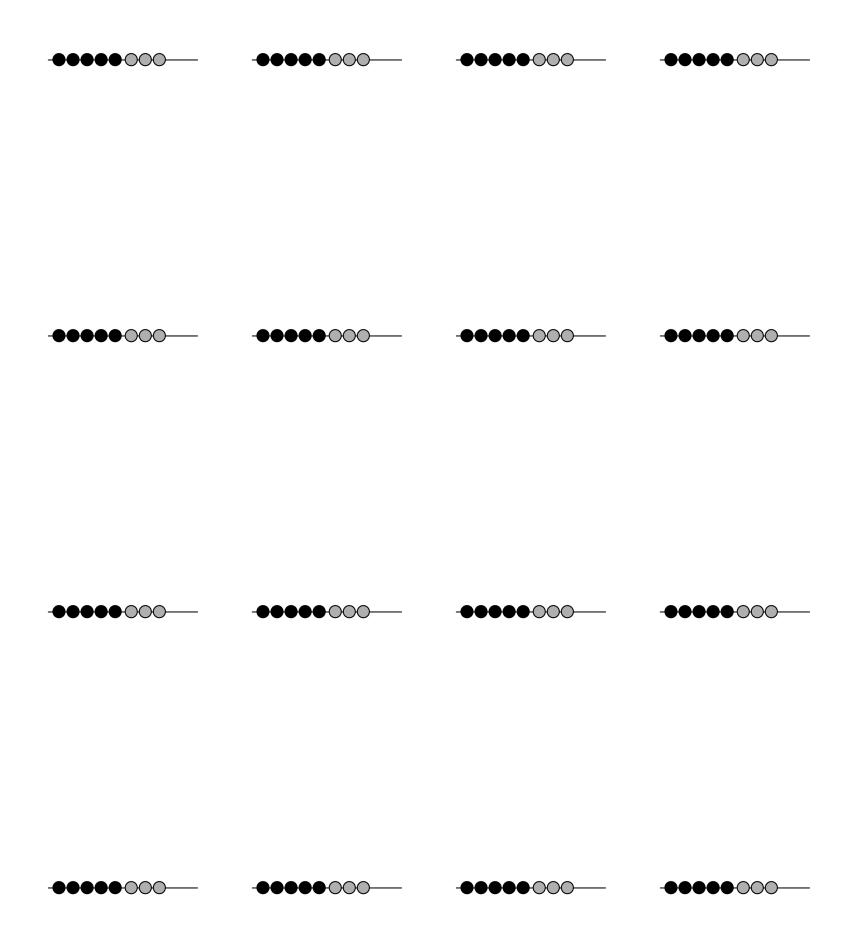


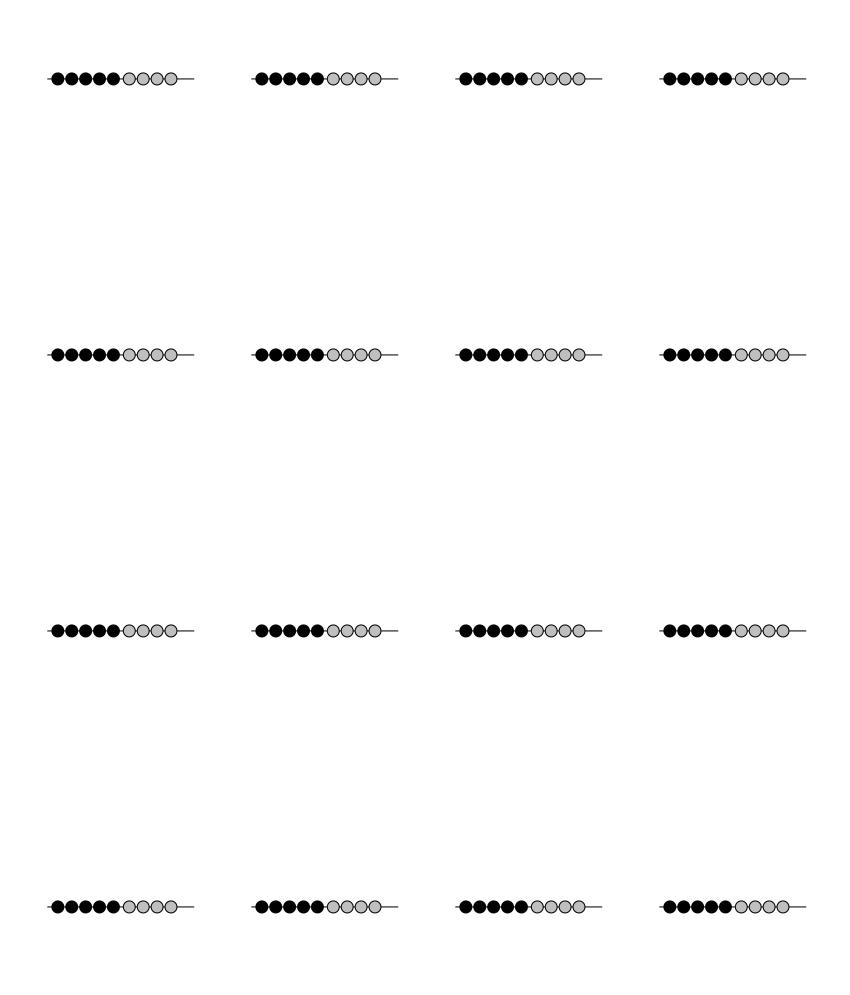




















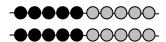


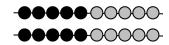




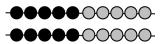


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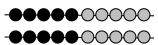




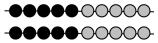
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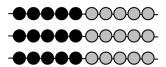
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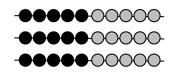


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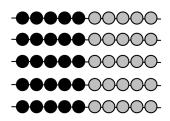
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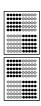
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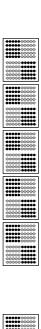
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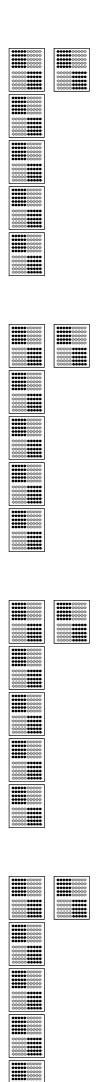
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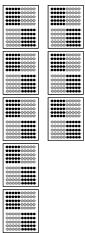
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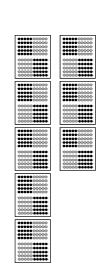
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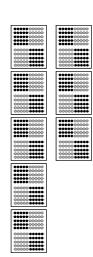
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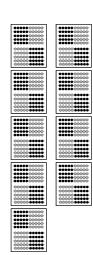
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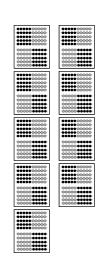
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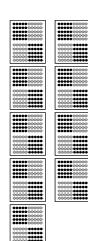
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