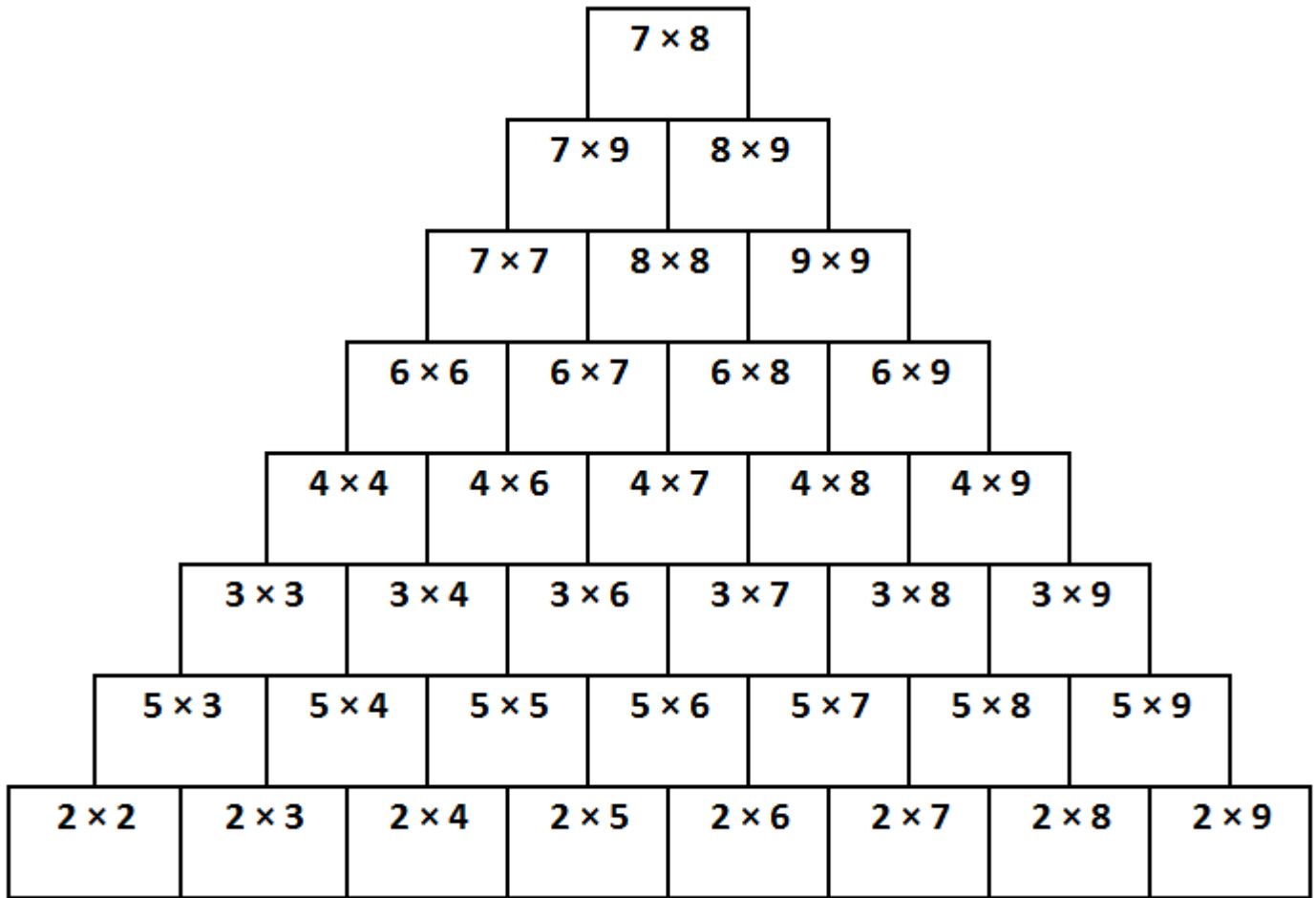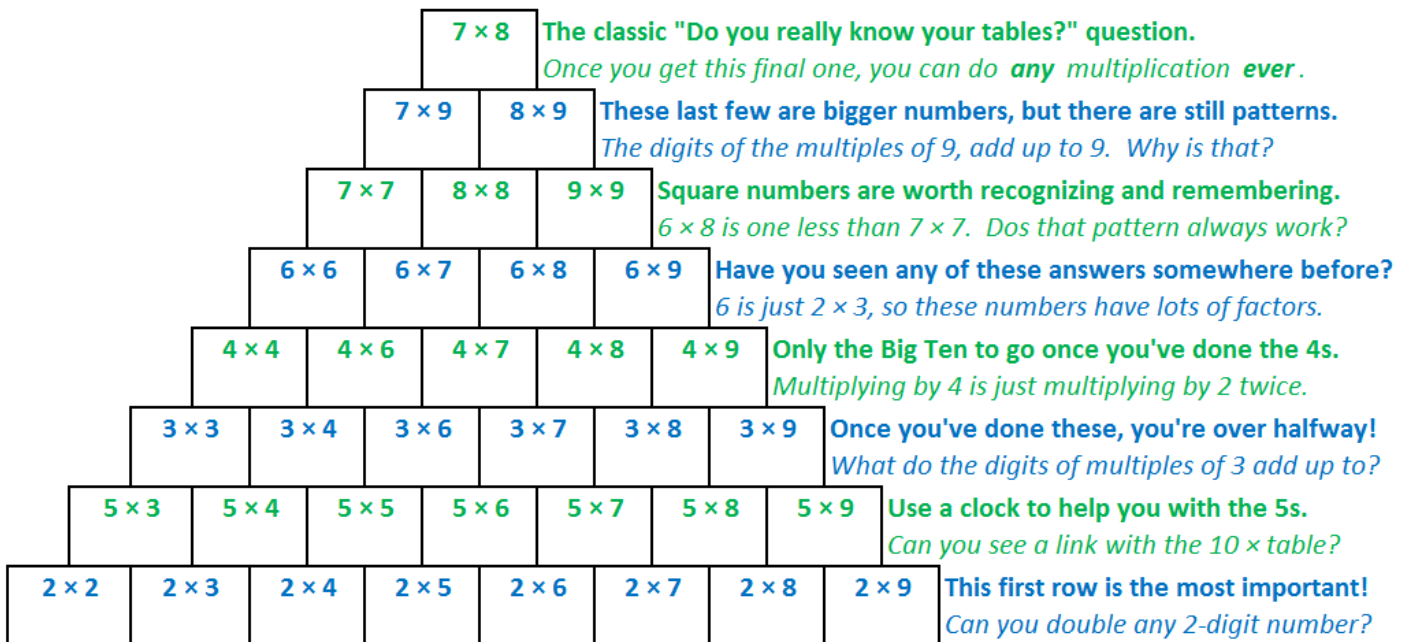# The Pyramid of Tables

There are only 36 different one-digit multiplication facts to learn.
Become fluent with the bottom row first, then move upwards.

			7 × 8				
		7 × 9	8 × 9				
		7 × 7	8 × 8	9 × 9			
	6 × 6	6 × 7	6 × 8	6 × 9			
	4 × 4	4 × 6	4 × 7	4 × 8	4 × 9		
3 × 3	3 × 4	3 × 6	3 × 7	3 × 8	3 × 9		
5 × 3	5 × 4	5 × 5	5 × 6	5 × 7	5 × 8	5 × 9	
2 × 2	2 × 3	2 × 4	2 × 5	2 × 6	2 × 7	2 × 8	2 × 9

Tick off boxes when you are sure you are *fluent*, and start looking for patterns:

- **7 × 8** — **The classic "Do you really know your tables?" question.** *Once you get this final one, you can do **any** multiplication **ever**.*
- **7 × 9 8 × 9** — **These last few are bigger numbers, but there are still patterns.** *The digits of the multiples of 9, add up to 9. Why is that?*
- **7 × 7 8 × 8 9 × 9** — **Square numbers are worth recognizing and remembering.** *6 × 8 is one less than 7 × 7. Dos that pattern always work?*
- **6 × 6 6 × 7 6 × 8 6 × 9** — **Have you seen any of these answers somewhere before?** *6 is just 2 × 3, so these numbers have lots of factors.*
- **4 × 4 4 × 6 4 × 7 4 × 8 4 × 9** — **Only the Big Ten to go once you've done the 4s.** *Multiplying by 4 is just multiplying by 2 twice.*
- **3 × 3 3 × 4 3 × 6 3 × 7 3 × 8 3 × 9** — **Once you've done these, you're over halfway!** *What do the digits of multiples of 3 add up to?*
- **5 × 3 5 × 4 5 × 5 5 × 6 5 × 7 5 × 8 5 × 9** — **Use a clock to help you with the 5s.** *Can you see a link with the 10 × table?*
- **2 × 2 2 × 3 2 × 4 2 × 5 2 × 6 2 × 7 2 × 8 2 × 9** — **This first row is the most important!** *Can you double any 2-digit number?*
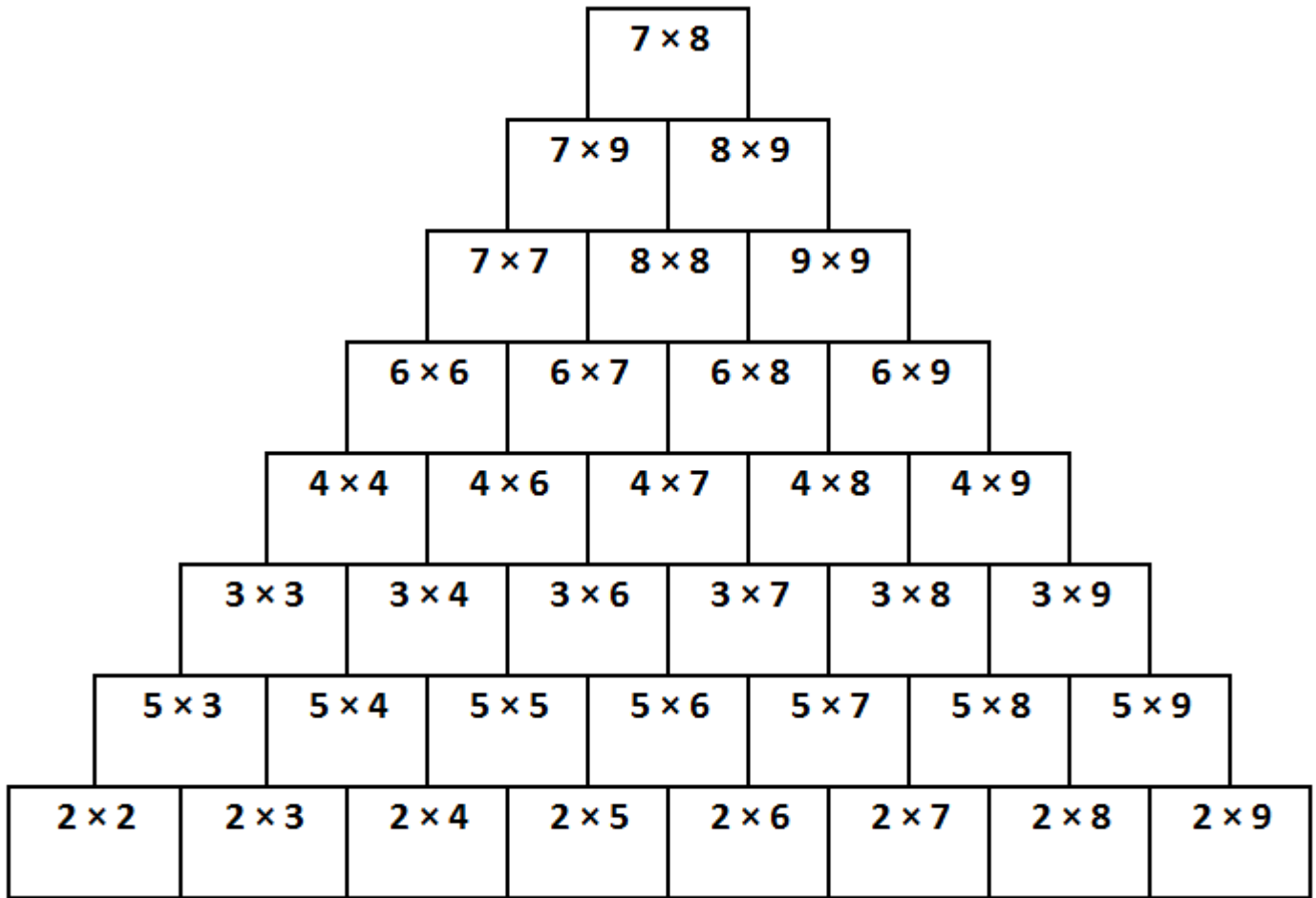
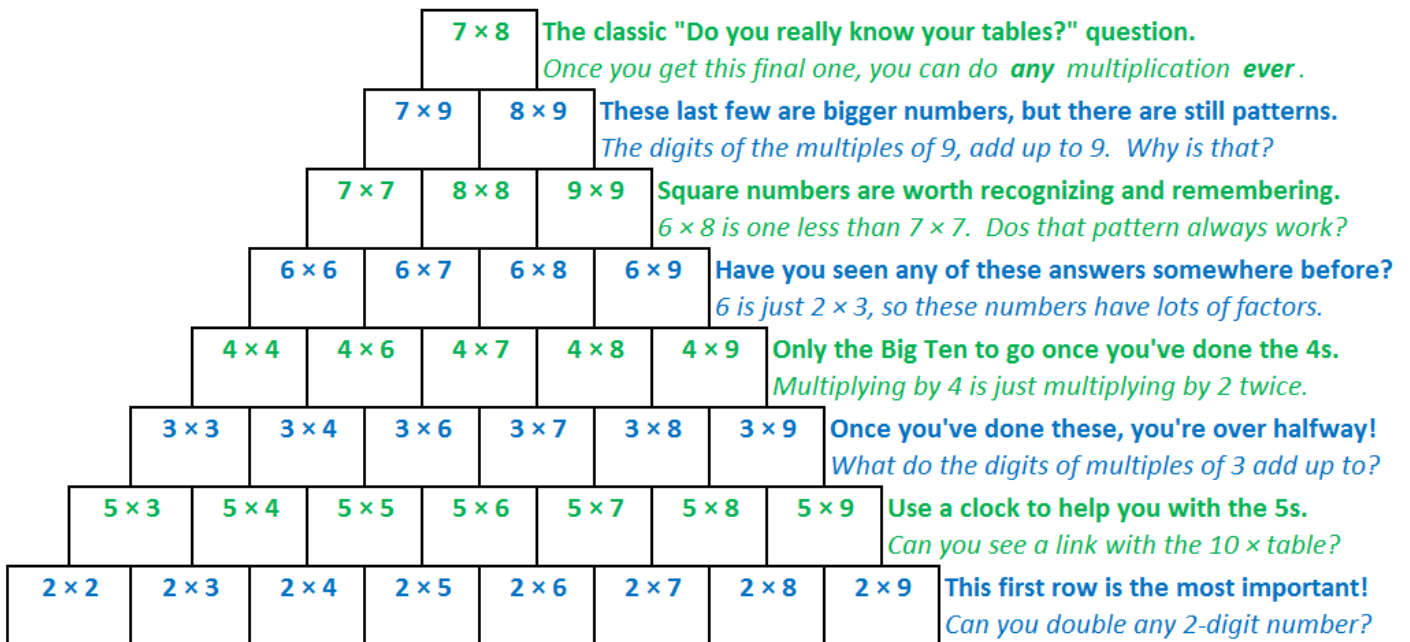**I did it!** *Now what?* The next step is *working backwards*:
Pick a two-digit number, and see if you can tell which times table it appears in.
Can you say which multiple of 6 it is closest to, or how many 7s go into it?

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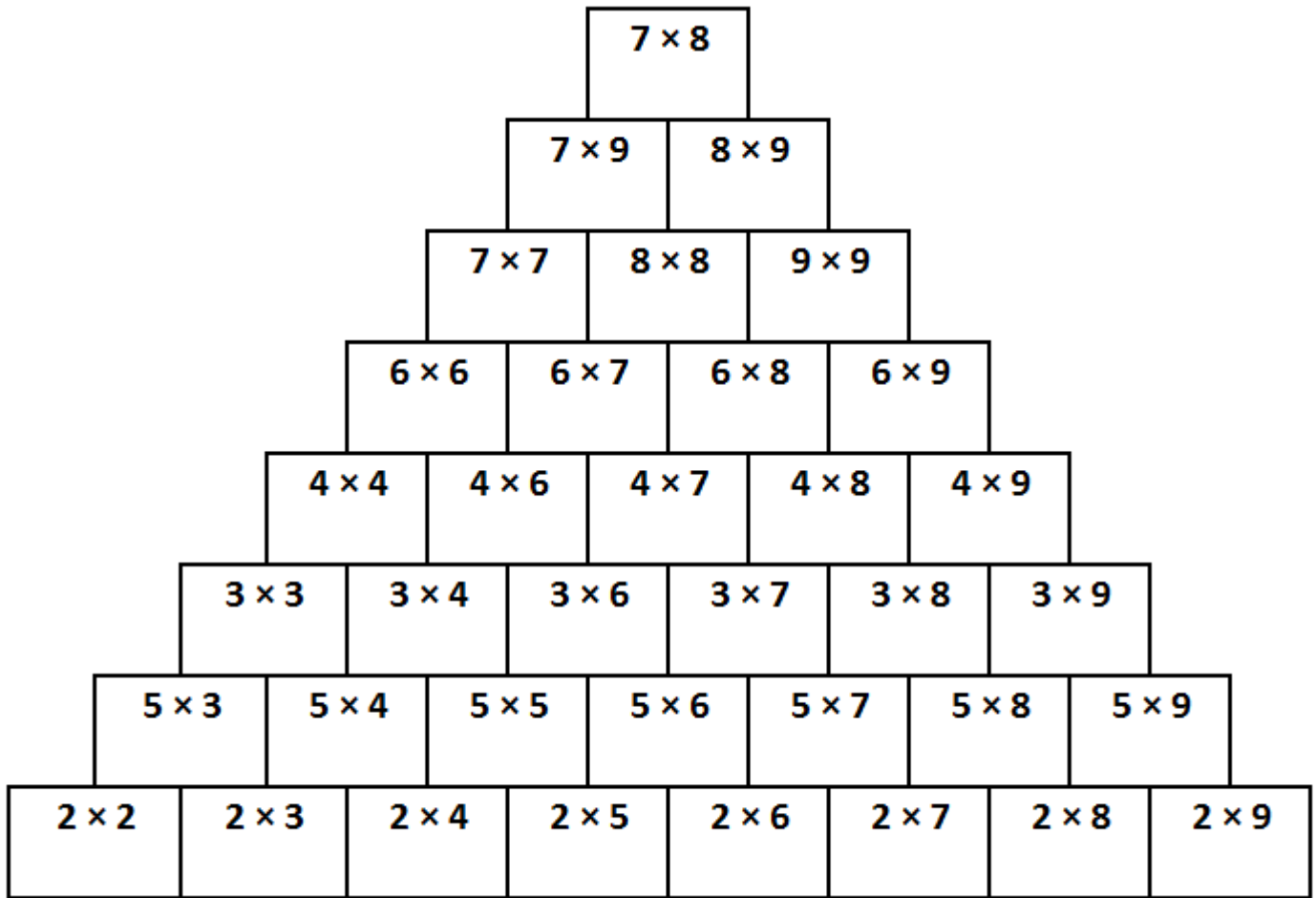*Can you double any 2-digit number?*

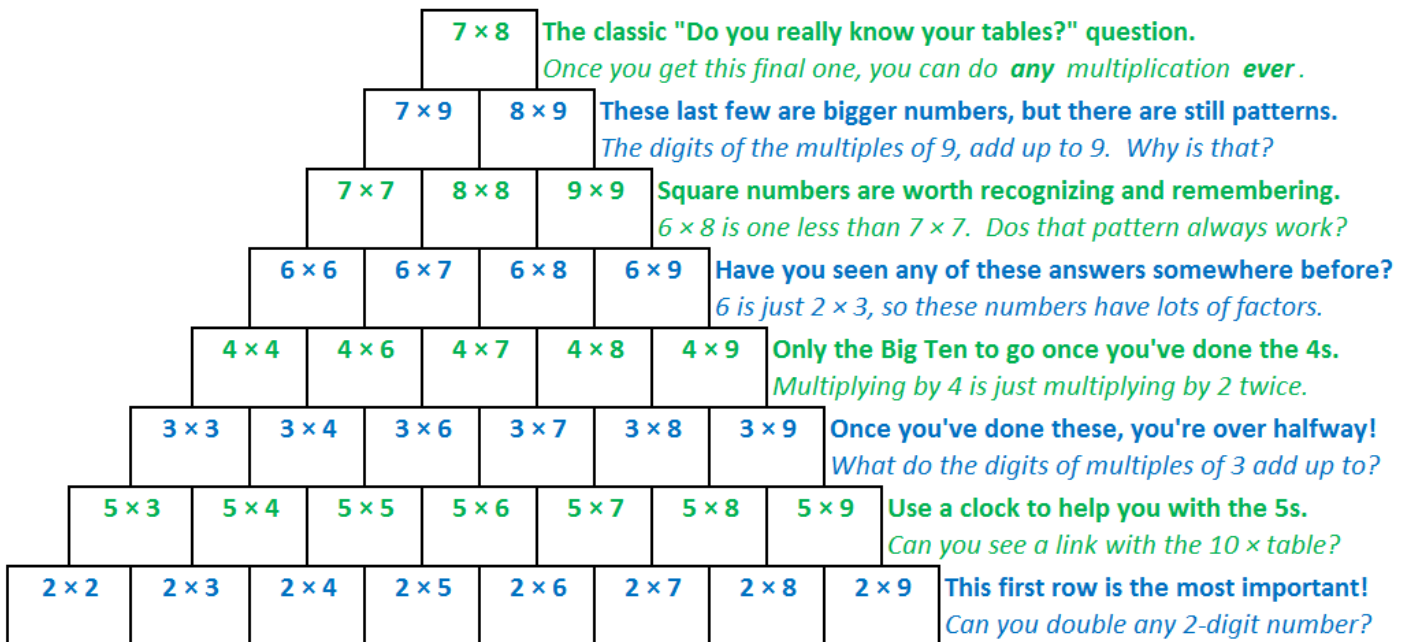**I did it!** *Now what?* The next step is *working backwards*:
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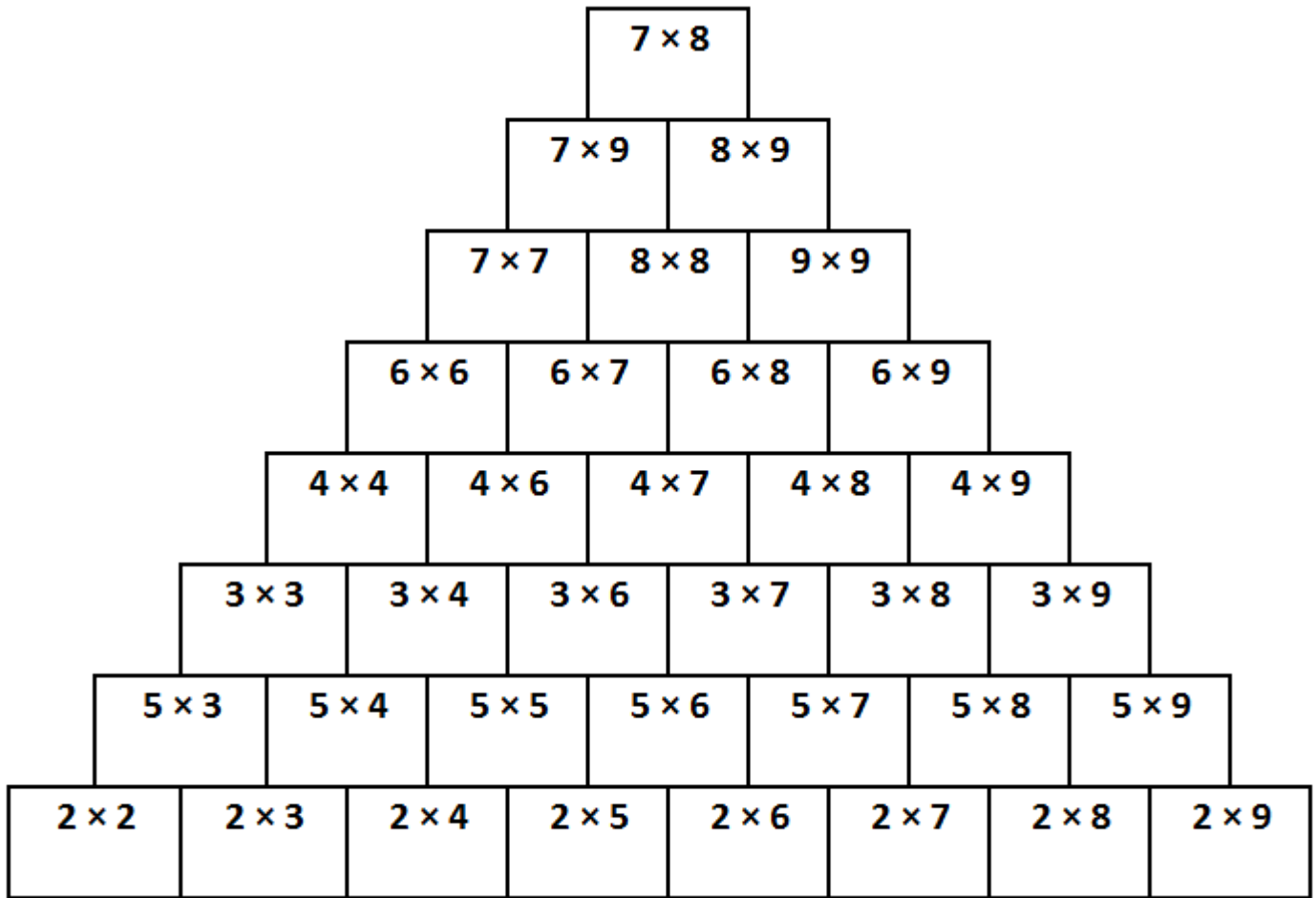*Can you double any 2-digit number?*

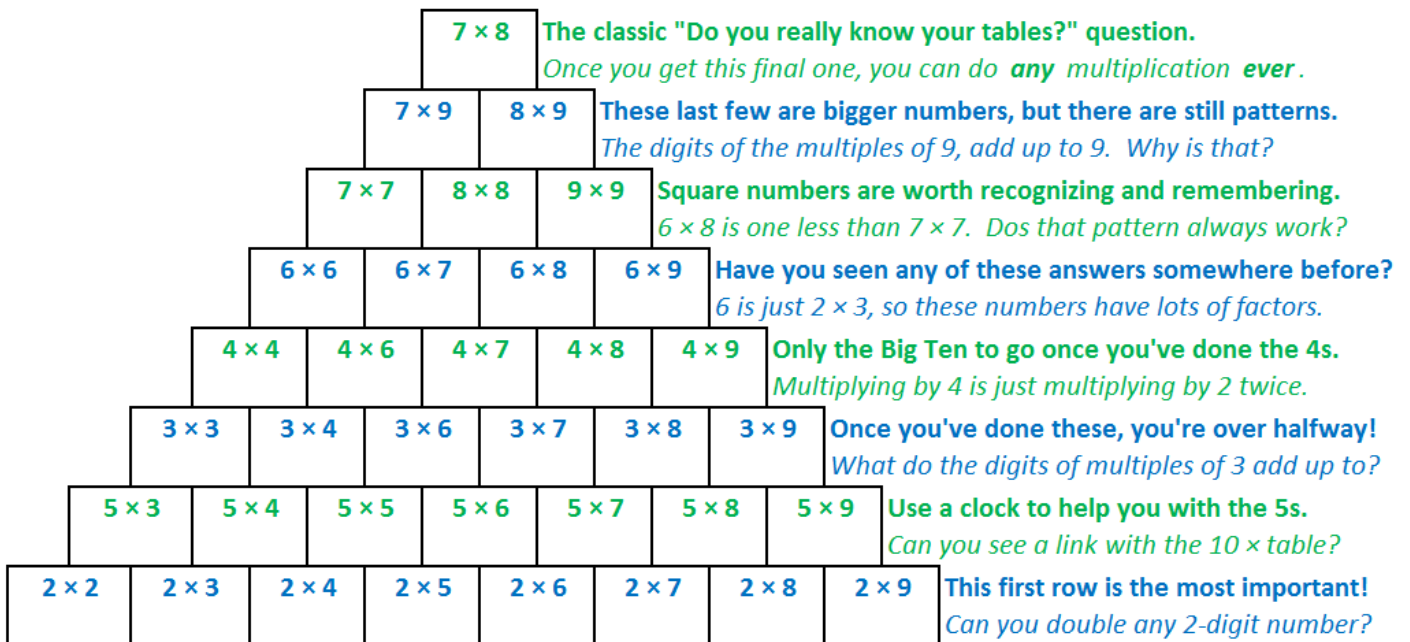**I did it!** *Now what?* The next step is *working backwards*:
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