

15 NUMBER CHAINS

Begin with any number less than 40.

Multiply the ones digit by 4.

Add the tens digit to this.

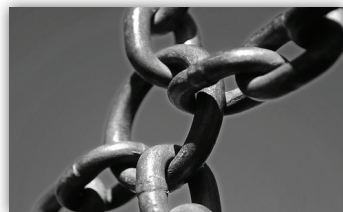
Repeat until you get back to the number you started with.

Example $32 \rightarrow 11 \rightarrow 5 \rightarrow 20 \rightarrow 2 \rightarrow 8 \rightarrow 32$

This is how to get the first link in the chain.

$32 \rightarrow 2 \times 4 = 8 \text{ and } 8 + 3 = 11 \rightarrow 11$

What is the longest number chain you can make this way?



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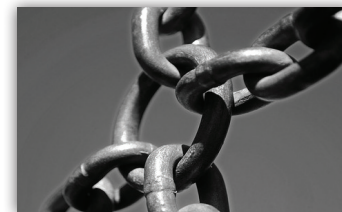
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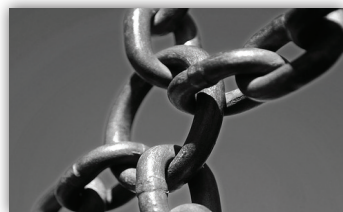
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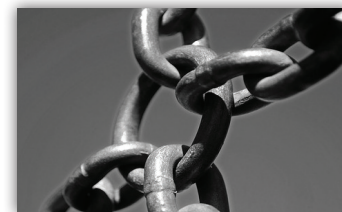
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