

Name: _____

Another problem.

The Problem.

If n is odd, multiply by five and add one. If n is even, divide by two. What happens?

I try a couple cases.

$$\begin{aligned} 10 &\rightarrow 5 \rightarrow 26 \rightarrow 13 \rightarrow 66 \rightarrow 33 \rightarrow 166 \rightarrow \dots \\ 3 &\rightarrow 16 \rightarrow 8 \rightarrow 4 \rightarrow 2 \rightarrow 1 \rightarrow 6 \rightarrow 3 \rightarrow \dots \end{aligned}$$

You try a few cases.

9 \rightarrow

14 \rightarrow

12 \rightarrow

18 \rightarrow

20 \rightarrow

100 \rightarrow

49 \rightarrow

In general?