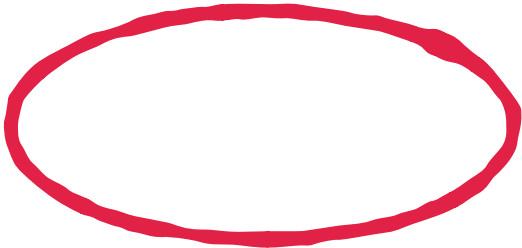




**Example**

	age	initial guess	residual
obs 1	21	22	-1
obs 2	22	22	0
obs 3	23	22	1
obs 4	22	22	0
obs 5	21	22	-1

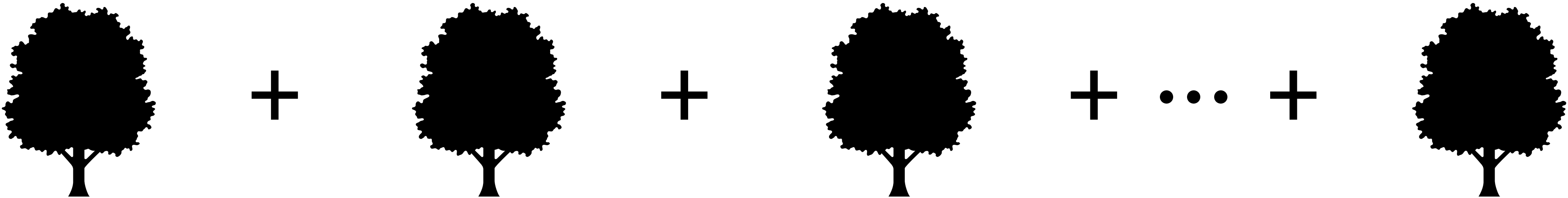
$$\text{actual value} = \text{predicted} + \text{residual}$$



*what if we had a tree that could predict the residuals made by the initial model?*

**$\Rightarrow$  gradient boosting tree!**

*instead of fitting a bunch of independent trees,  
we incrementally improve on our initial guess*





# Example

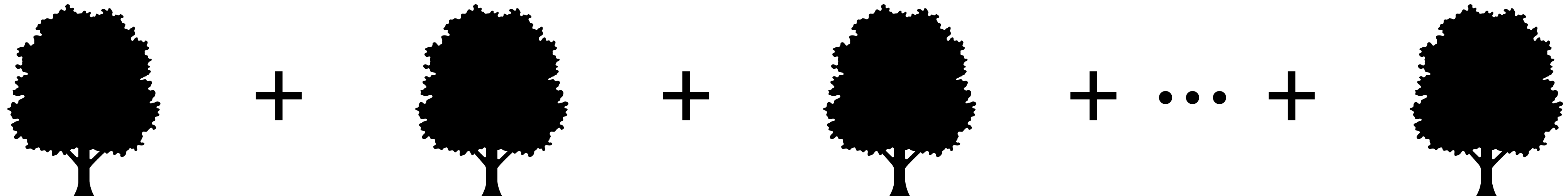
	age	initial guess	residual
obs 1	21	22	-1
obs 2	22	22	0
obs 3	23	22	1
obs 4	22	22	0
obs 5	21	22	-1

actual value = predicted + residual

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**⇒ gradient boosting tree!**

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