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Softball Bouncing

- When dropped onto a hard surface, a brand new softball should rebound to about $\frac{2}{5}$ the height from which it is dropped

- a) Write a **recursive rule and function rule** to model the situation.
- b) If the softball is dropped from 25 feet from a window onto concrete, **make a table** of the heights for the first 5 bounces?

- When dropped onto a hard surface, a brand new golf ball should rebound to about $\frac{5}{8}$ the height from which it is dropped

- a) Write a **recursive rule and function rule** to model the situation.
- b) If the softball is dropped from 25 feet from a window onto concrete, **make a table** of the heights for the first 5 bounces?

- Here are some data from bounce tests of a softball dropped from a height of 10 feet

Bounce Number	1	2	3	4	5
Height in feet	3.8	1.3	.6	.2	.05

- a) Use your calculator to determine the function rule. Write this function rule and the recursive rule.
- b) What do the numbers in the function rule tell you about the softball?