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| :---: | :---: | :---: |
|  |  <br> A pattern that begins with a term $f(I)$ and describes how to get the next term $f(x)$ from the pervious term $f(x-I)$ |  An equation that does not need the previous term to find a specificic term in the pattern. |
|  | $\begin{aligned} & f(0)=b \\ & f(x)=f(x-1)+c \end{aligned}$ <br> Where c is the constant growth. | $f(x)=m x+b$ |
|  | $\begin{aligned} & f(0)=b \\ & f(x)=f(x-1) * r \end{aligned}$ <br> Where $r$ is the ratio to multiply by. This is either a whole number or fraction. | $f(x)=b * r^{x}$ |
|  | $\begin{aligned} & f(0)=b \\ & f(x)=f(x-1)+m x+b \end{aligned}$ <br> $\mathrm{m} x+b$ is the linear growth. | $\begin{aligned} & f(x)=\text { ax } x^{2}+b x+c \\ & a=2 n d \text { difference } \div 2 \\ & b=\text { After a and } c, \\ & \text { use any point to find } b . \\ & c=y \text { when } x=0 \end{aligned}$ |

