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| **Using the Nth Term of Quadratic Sequences** |
| $$u\_{n}=n^{2}+3n-5$$ | $$u\_{n}=3n^{2}-n+1$$ | $$u\_{n}=n^{2}-2n$$ | $$u\_{n}=n^{2}+an-b$$ |
| **(a)** | **(a)** | **(a)** | **(a)** |
| Find the value of $u\_{4}$ | Find the value of $u\_{6}$. | Find the $9^{th}$ term of the sequence. | Find the value of $u\_{5}$ in terms of $a$ and $b$. |
| **(b)** | **(b)** | **(b)** | **(b)** |
| Find the difference between the $6^{th}$ term and the $7^{th}$ term. | Find the sum of the $9^{th}$ term and the $10^{th}$ term. | Find an expression for the $(n+1)^{th}$ term. | Find the value of $u\_{7}$ in terms of $a$ and $b$. |
| **(c)** | **(c)** | **(c)** | **(c)** |
| A term of the sequence is $65$ Find the value of $n$. | A term of the sequence is $103$ Find the value of $n$. | Find an expression for the difference between the $n^{th}$ and the $(n+1)^{th}$ term. | Given that $u\_{5}=25$ and $u\_{7}=70$, find the values of $a$ and $b$. |