

## Using the Nth Term of Sequences

$u_n = \frac{6n}{n+7}$	$u_n = \frac{4n+3}{n+1}$	$u_n = \frac{10-3n}{2+n}$	$u_n = \frac{4n^2}{n^2+8}$
<b>(a)</b>	<b>(a)</b>	<b>(a)</b>	<b>(a)</b>
Find the value of $u_8$ as a fraction in its simplest form.	Find the value of $u_9$ .	Find the 6 <sup>th</sup> term.	Find the value of $u_5$ as a mixed number.
<b>(b)</b>	<b>(b)</b>	<b>(b)</b>	<b>(b)</b>
A term of the sequence is $\frac{11}{3}$ Find the value of $n$ .	A term of the sequence is $\frac{15}{4}$ Find the value of $n$ .	A term of the sequence is $-\frac{7}{5}$ Find the value of $n$ .	Find the term in the sequence closest to 3.8
<b>(c)</b>	<b>(c)</b>	<b>(c)</b>	<b>(c)</b>
Find the difference between the 5 <sup>th</sup> term and the 9 <sup>th</sup> term.	Find the sum of the 4 <sup>th</sup> term and the 14 <sup>th</sup> term.	Find $2u_{10} - u_{16}$	Find the difference between the 8 <sup>th</sup> term and the 10 <sup>th</sup> term.
<b>(d)</b>	<b>(d)</b>	<b>(d)</b>	<b>(d)</b>
Find the first term in the sequence that is greater than 4	Find the first term in the sequence that is greater than 3.9	Find the first term in the sequence that is negative.	Find the smallest value of $n$ for which $u_n > \frac{7}{2}$