a)
Determine whether 156 is a term in the sequence which starts
4, 7, 10, 13, 16, …

What is the general term for the sequence?	$4, 7, 10, 13, 16, \ldots = 3n + 1$
How can you find the position number of 156 in the sequence?	$3n + 1 = 156$ $3n \quad +1 = 156$ $\quad -1 \quad -1$ $3n \quad = 155$ $\div 3 \quad \div 3$ $n \quad = 51.\dot{6}$
What does this mean about the position of the term in the sequence?	Because n is not a whole number, 156 is not a term in the sequence which starts 4, 7, 10, 13, 16, …

b)
Determine whether 166 is a term in the sequence which starts
5, 12, 19, 26, 33, …

What is the general term for the sequence?	$5, 12, 19, 26, 33, \ldots = 7n - 2$
How can you find the position number of 166 in the sequence?	$7n - 2 = 166$ $7n \quad -2 = 166$ $\quad +2 \quad +2$ $7n \quad = 168$ $\div 7 \quad \div 7$ $n \quad = 24$
What does this mean about the position of the term in the sequence?	

c)
Determine whether 254 is a term in the sequence which starts
25, 34, 43, 52, 61, …

What is the general term for the sequence?	$25, 34, 43, 52, 61 \ldots = 9n + 16$
How can you find the position number of 254 in the sequence?	
What does this mean about the position of the term in the sequence?	

d)
Determine whether 154 is a term in the sequence which starts
1, 4, 7, 10, 13, …