## (C1-6.5) Name:

## Homework Questions 5 - Arithmetic Sequences

1. Find the number of terms in the following sequences if you are given the first few and the last term.
a) $12,25,38, \ldots \ldots . .155$
b) $198,192,186,180, \ldots \ldots \ldots . .78$
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$\square$
$\square$
2. Find the first term of the sequence and the common difference if
a) $U_{2}=2 \quad U_{5}=17$
b) $U_{4}=-10 \quad U_{8}=-6$
$\square$
$\square$
3. Find the $22^{\text {nd }}$ term and the nth term of the following sequences
a) $5,11,17,23 \ldots$.
b) $25,21,17,13 \ldots$
$\square$

4. If the first term of an arithmetic sequence is 8 and the common difference is -5 . what is the $22^{\text {nd }}$ term?
5. An arithmetic sequence has a first term of 15 and the $8^{\text {th }}$ term is 43 . What are the first four terms of the sequence?

6. The first two terms of an arithmetic sequence are $a+2 b$ and $7 b$. Find the $3^{\text {rd }}$ term.
$\square$
7. What is the common difference of the arithmetic sequence with a $6^{\text {th }}$ term of -56 and an $11^{\text {th }}$ term of 11 ?
$\square$
