

MATH 166
SUMMER 2012
QUIZ 16

1. Consider the sequence defined recursively by $a_1 = 1$ and $a_{n+1} = \frac{4}{4-a_n}$.
 - a) (5 pt) Show that $1 \leq a_n \leq 2$ for all n .
 - b) (5 pt) Show that this sequence is increasing for all n .
 - c) (5 pt) Given parts a) and b), what can we say about this sequence?
 - d) (5 pt) Find the limit of this sequence.