## Mathematics 122

Quiz \#2
Name: $\qquad$

A colony of bacteria has mass $A(t)=45(1.06)^{t} \mathrm{mg}$ (milligrams) in $t$ hours after being put in a Petri dish.
(1) How many milligrams of bacteria were there when the colony was fist added to the Petri dish?
(2) How many milligrams of bacteria are there seven hours after being added to the Petri dish?
$\qquad$
(3) What is the average rate of change of the size of the bacteria colony in the first seven hours it is in the Petri dish?

