4) A biologist is researching a newly-discovered species of bacteria. At time $t=$ 0 hours, he puts one hundred bacteria into what he has determined to be a favorable growth medium. Six hours later, he measures 450 bacteria. Assuming exponential growth, what is the constant growth rate " $r$ " for the bacteria? Sketch the graph for the growth model.
$r=0.25$
25\% rate

