

# Mathematics 122 Quiz #9

Name: \_\_\_\_\_

A ship leaves port with ten cockroaches on board. If a population of roaches increases at 25% per week then answer the following

1. What is a formula for the number  $R(t)$  of roaches after  $t$  weeks?

$R(t) =$  \_\_\_\_\_

2. How many roaches are there after 20 weeks?

\_\_\_\_\_

3. How long before there are 1000 roaches?

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