1. a) $R_t(k) = \frac{90}{100} * \frac{105}{90} - 1$

$R_t(k) = 0.05$

b) $R_{t+1} = \frac{90}{100} - 1 = 0.9 - 1 = -0.1$

$R_{t+2} = \frac{105}{90} - 1 = .167$

c) The multiperiod simple return is equal to the product of the single period simple returns, added to one.

d) $105 = 100 * e^{(2i)}$

$1.05 = e^{2i}$

$2i = \ln(1.05)$

$i = .0488$

e) $90 = 100 * e^{(i)}$

$.9 = e^{i}$

$i = \ln(.9)$

$i = -.105$

$105 = 90 * e^{i}$

$1.167 = e^{i}$

$i = \ln(1.167)$

$i = .154$

e) The multiperiod simple return is equal to the sum of the single period continuously compounding returns.