Q1:

$i_e = 9\%$, r: monthly interest rate if compounded monthly.

$1 + 9\% = (1 + r)^{12}$ $\Rightarrow$ $r = 0.007207 = \boxed{0.7207\%.}$

Q2:

$r : 4.6\%$ daily compounding

$i_e = (1 + \frac{4.6\%}{252})^{252} - 1 = \boxed{4.707\%}$

Q3:

Assume 3% interest per year compounded quarterly:

$e^r - 1 = i_e = (1 + \frac{3\%}{4})^4 - 1$ $\Rightarrow$ $r = \boxed{2.989\%}$

Q4:

$e^{4r} - 1 = i_e = (1 + 1.3\%)^{12} - 1$, $r = \boxed{3.874\%.}$

Q5:

Semi-annual rate: $r_s + 1 = (1 + \frac{2.9\%}{3})^6$ $\Rightarrow$ $r_s = 5.942\%$

effective interest rate per 2 year: $i_e = (1 + r_s)^4 - 1 = 0.2597$

Semi-annual rate per 2 year: $(1 + \frac{r}{4})^4 = 1 + 0.2597$

$\Rightarrow$ $r = \boxed{2.377\%}$