

Substitute $A = 2,080.8$, $P = 2,000$, and $t = 1$ into the formula: $2,080.8 = 2,000\left(1 + \frac{r}{2}\right)^{2 \cdot 1}$

Divide both sides by 2,000: $1.0404 = \left(1 + \frac{r}{2}\right)^2$

Use the Square Root Property: $\pm 1.02 = 1 + \frac{r}{2}$

Subtract 1 from both sides: $1.02 - 1 = \frac{r}{2}$ or $-1.02 - 1 = \frac{r}{2}$

Simplify and multiply both sides by 2: $r = 0.04$ or $r = -4.04$

The negative rate does not make sense, so $r = 0.04$ is the answer.