## Logarithm Word Problems - Matching Worksheet

Write the letter of the answer that matches the problem.

1. Emily is running her own business on a low level. She wants to invest $\$ \mathbf{2 , 5 0 0}$ and gets $\mathbf{5 . 5 \%}$ interest compounded monthly for 1 year. How much is her $\$ 2,500$ worth after 1 year?
2. Five years ago Matthew wanted to start a school. He borrowed $\$ 450$ from Nicholas. Today, Matthew paid Nicholas back \$650. What is the annual interest rate that Matthew paid?
3. Alexis mortgage of $\$ 15,000$ is at an interest rate of $\mathbf{6 \%}$ that is compounded annually for 4 years. What total did Alexis pay after 4 years?
c. $6.67 \%$
4. Jessica has a savings bond that will be worth $\$ 86,000$ in seven years. The bond has an interest rate of $6 \%$ that is compounded every six months. What is the value of the bond?
5. Brianna has a savings account that will be worth $\$ \mathbf{9 6}$,250 in two years. The account has an interest rate of $7.5 \%$ that is compounded every six months. What is the value of the account?
6. Five years ago Zachary wanted to buy a house. He borrowed $\mathbf{\$ 1 , 0 5 0}$ from John. Today, Zachary paid John back $\mathbf{\$ 1 , 4 5 0}$. What is the annual interest rate that Zachary paid?
7. Abigail is a house wife. She wants to invest $\$ 800$ and gets $4.5 \%$ interest compounded monthly for 1 year. How much is her $\$ 800$ worth after 1 year?
f. $\$ 83,070.79$
g. $\quad \$ 836.75$
