PROBLEM SET 8-2
(Properties of Exponential Functions)

Graph each function. Label the asymptote of each graph.

1. $y=-5^{x}$

2. $y=-\left(\frac{1}{3}\right)^{x}$

3. $y=-2(5)^{x+3}$

4. $y=-3(2)^{x}$

5. $y=-24\left(\frac{1}{2}\right)^{x}$

6. $y=9\left(\frac{1}{3}\right)^{x+7}-3$


Find the amount in a continuously compounded account for the given conditions.
Principal Annual Interest Rate Time
7. $\$ 2000 \quad 5.1 \% \quad 3$ years
8. $\$ 400$
7.6\%
1.5 years
9. $\$ 950 \quad 6.5 \% \quad 10$ years
10. A student wants to save $\$ 8000$ for college in five years. How much should be put into an account that earns $5.2 \%$ annual interest compounded continuously.

