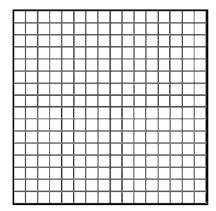
PROBLEM SET 8-2

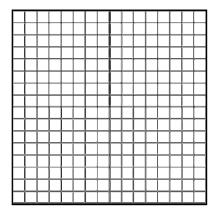
(Properties of Exponential Functions)

Graph each function. Label the asymptote of each graph.

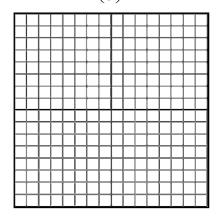
1.
$$y = -5^x$$



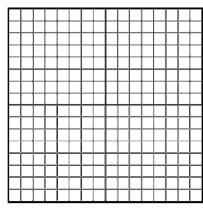
2.
$$y = -3(2)^x$$



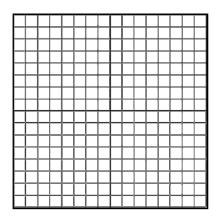
3.
$$y = -\left(\frac{1}{3}\right)^{\frac{1}{3}}$$



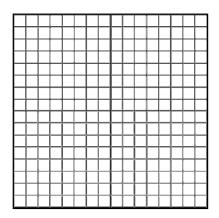
4.
$$y = -24 \left(\frac{1}{2}\right)^x$$



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



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 | 5.1% | 3 years |
| 8. | \$400 | 7.6% | 1.5 years |
| 9. | \$950 | 6.5% | 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.