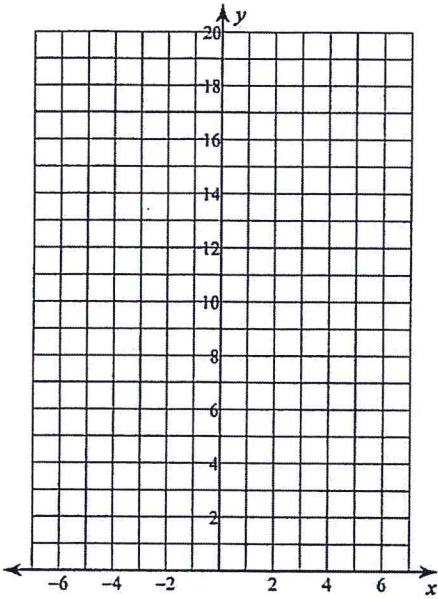


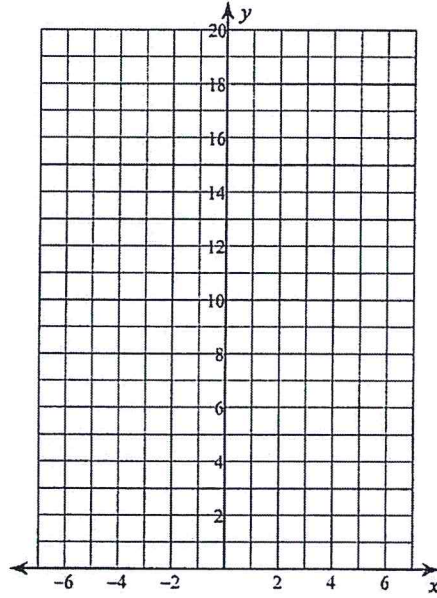
Review Exponential Functions

Sketch the graph of each function.

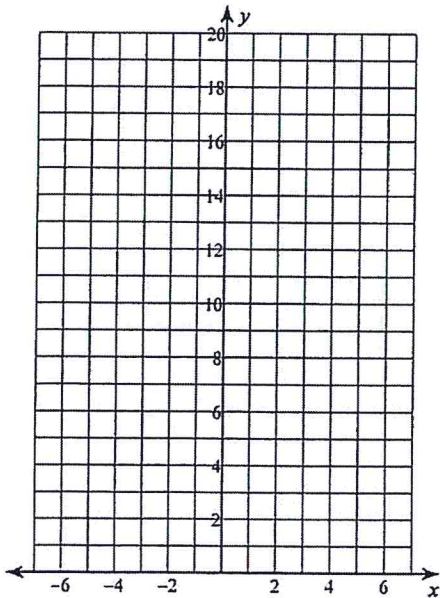
1) $y = 3^x$



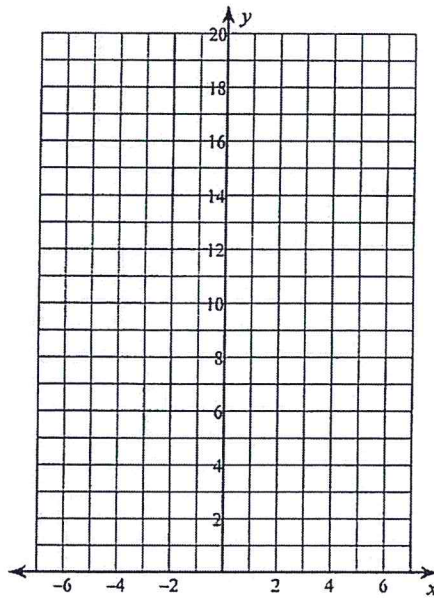
2) $y = \left(\frac{1}{2}\right)^x$



3) $y = \frac{1}{4} \cdot 2^x$



4) $y = 4 \cdot 2^x$



For #1-12, write the problem # near its answer.

Evaluate the function when $t = 4$. Round your answer to the nearest hundredth.

1. $y = 275(1 + 0.85)^t$ 2. $y = 9(1 + 0.03)^t$

3. $f(t) = 16(1.7)^t$ 4. $p(t) = 8.21(1.09)^t$

Evaluate the function when $t = 7$. Round your answer to the nearest hundredth.

5. $y = 725(1 - 0.1)^t$ 6. $g(t) = 360(0.45)^t$

7. $r(t) = \left(\frac{11}{12}\right)^t$ 8. $h(t) = 0.8\left(\frac{3}{5}\right)^t$

Write a function that represents the situation.

- A \$33,000 vehicle decreases in value by 27% each year.
- Your hourly wage of \$9.56 increases by 3% each year.
- A population of five fruit flies increases by 12.5% each day.
- A \$4000 deposit earns 2% annual interest compounded semiannually after t years.

Answers	Problem #
L. 11.59	
T. 0.02	
E. 10.13	
R. 0.54	
H. 346.77	
E. 1.35	
A. 3221.21	
H. 133.63	
F. $f(t) = 5(1 + 0.125)^t$	
H. $f(t) = 9.56(1.03)^t$	
T. $f(t) = 4000(1.01)^{2t}$	
O. $f(t) = 33,000(1 - 0.27)^t$	

Solve the equation. Check your solution.

1. $7^{8x} = 7^{16}$

3. $4^{10x} = 4^{6x+12}$

5. $3^x = 81$