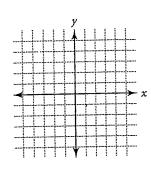
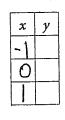
## graph the function by plotting 3 points.

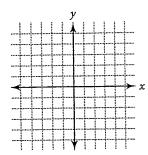
$$1. y = \left(\frac{3}{2}\right)^x$$

x	y
-1	
0	
1	



**2.** 
$$y = 3(\frac{1}{2})^x$$





Without graphing, determine whether the function represents exponential growth or decay, then find the y-intercept.

$$3 \cdot y = 2(1.05)^x$$

$$4 \cdot y = 4 \left(\frac{3}{5}\right)^x$$

$$5.y = 3(0.45)^x$$

Find the growth or decay factor.

9. You invest \$5000 in an account that earns interest at an effective rate of 8.4% per year. In how many years will you have over \$6800 in the account? Use a calculator and table to solve

10. A manufacturer bought a new rolling press for \$48,000. It has depreciated in value at an annual rate of 15%. What is its value 5 years after purchase? Round to the nearest hundred dollars.

## Identify each function as linear, quadratic, or exponential.

11. 
$$f(x) = 0.7x - 12$$

12. 
$$f(x) = 25 - 1.8 x^2$$

13, 
$$f(x) = 7(0.5)^x$$

Find the final value of each investment.		
14.	\$1000 at 4.5% compounded annually for 5 years	<u> </u>
15.	\$800 at 6.2% compounded monthly for 10 years	
16.	\$2300 at 8% compounded daily for 7 years	<del></del>

17. You place \$900 in an investment account that earns 6% interest compounded continuously. Find the balance after 5 years.