

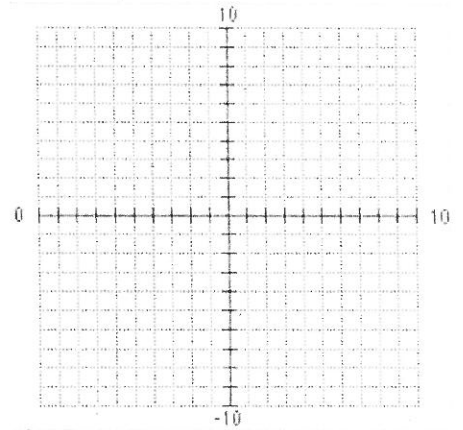
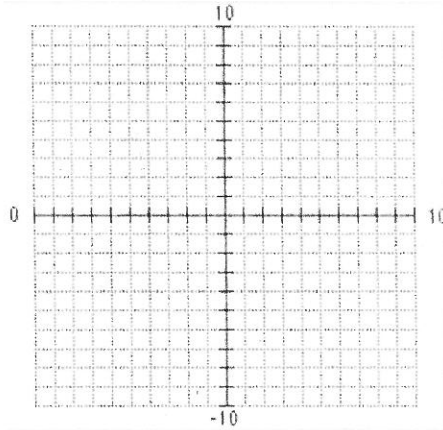
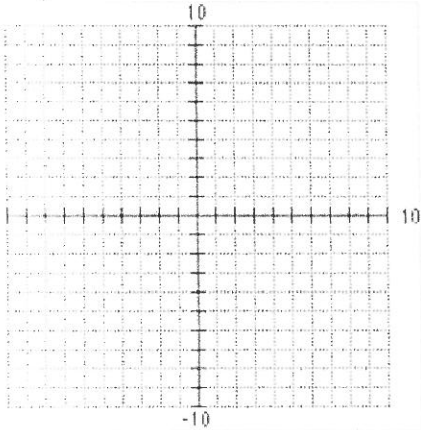
- Tracey deposited \$1500 into a savings account that earns 2% interest. Tracey is 15 years old. If he leaves his money in the account until he is 45, how much will he have?
- Haley has an ending balance of \$9,001 in her savings account. Her grandma opened the account for her on the day she was born, 15 years ago. If the account earns 6.5% interest, how much did Haley's grandma initially deposit?
- An equation that models the population change in sea otters in a California Bay is  $y = 274(1.15)^x$ .
  - What does the 274 represent? Be specific
  - What does the 1.15 represent? Be specific
- Find the growth rate in each situation:
  - depreciates 12% per year
  - Grows 1.75% annually

## #5-7, Graph each

5  $y = 2(3)^x$

6.  $y = 25(1.5)^x$

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



- What is the asymptote of the graph in #6?
- Will bought a car for \$18,200. The car *loses* 8% of its value each year. How much will the car be worth after 4 years?
- Joey deposited \$2000 in a stock fund. The fund actually *lost* 1.5% annually. Joey left his money in the fund for 5 years, *how much money did he lose*?
- In your own words, describe one difference between a linear situation and an exponential situation.

## #12-14, Use the information to write the exponential equation for each situation.

12.

x	y
0	21
1	7
2	2.33
3	.78
4	.26

13.

x	y
1	12.5
2	31.25
3	78.125
4	195.31

14. (2, 8) (3, 40)

15. Fill in the table of values using
- $f(x) = 10(.75)^x$

x	"-1"	"-2"	"-3"
y			