11-2 Practice
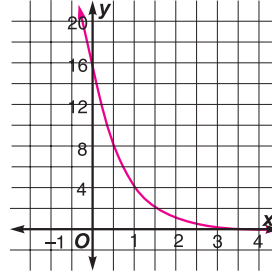
Exponential Functions

Graph each exponential function or inequality.
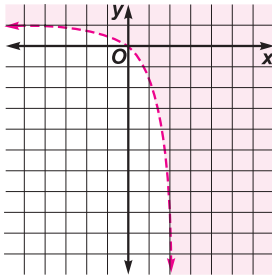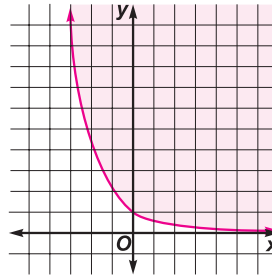
1. $y = 2^{x-1}$
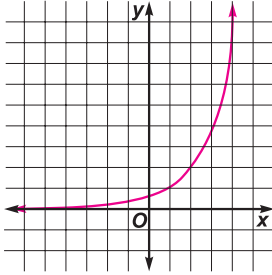
2. $y = 4^{-x+2}$

3. $y > -3^x + 1$

4. $y \geq 0.5^x$

5. *Demographics*   An area in North Carolina known as
The Triangle is principally composed of the cities of Durham,
Raleigh, and Chapel Hill. The Triangle had a population of
700,000 in 1990. The average yearly rate of growth is 5.9%. Find
the projected population for 2010.   **about 2,203,014**

6. *Finance*   Determine the amount of money in a savings account
that provides an annual rate of 4% compounded monthly if the
initial investment is $1000 and the money is left in the account
for 5 years.   **about $1221.00**

7. *Investments*   How much money must be invested by
Mr. Kaufman if he wants to have $20,000 in his account
after 15 years? He can earn 5% compounded quarterly.

about $9491.35

11-2

Finding

Perhaps you
such as $x =$
original equ
finding solu
process.

Solve each

1. If $a > 0$,
Yes, si
prop. c

2. If $c > 0$,
a solution
Yes; re
but if (
symme

3. Use 2 as
  a. Find e
   could
   functi
   $f(x) =$
  b. Use t
   $x^2 = 2$
   $x^y = y$
   Sam

4. In this ex
Use the t
Then gra
symptote
that in th
call for tw

x	y
$\frac{1}{2}$	$\frac{1}{2}$
$\frac{3}{4}$	$\frac{3}{4}$
1	1
2	2
4	2
3	3
2.5	3