

**LESSON**  
**7-1**

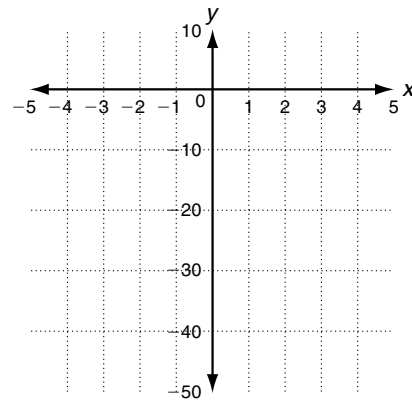
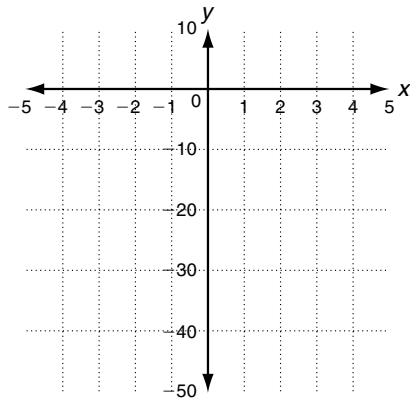
**Practice B**

**Exponential Functions, Growth, and Decay**

Tell whether the function shows growth or decay. Then graph.

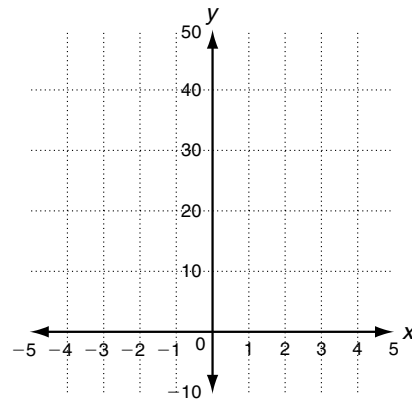
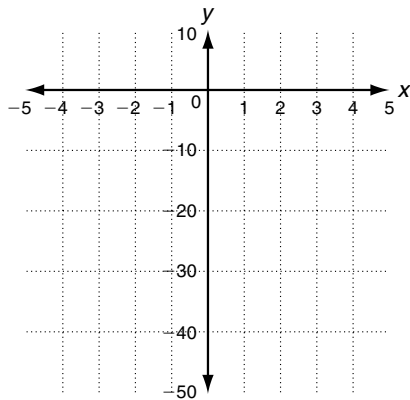
1.  $g(x) = -(2)^x$

2.  $h(x) = -0.5(0.2)^x$



3.  $j(x) = -2(0.5)^x$

4.  $p(x) = 4(1.4)^x$



**Solve.**

5. A certain car depreciates about 15% each year.

a. Write a function to model the depreciation in value for a car valued at \$20,000.

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b. Graph the function.

c. Suppose the car was worth \$20,000 in 2005. What is the first year that the value of this car will be worth less than half of that value?

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