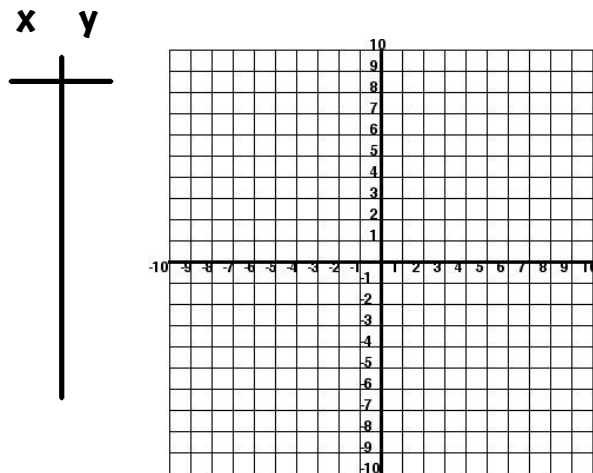
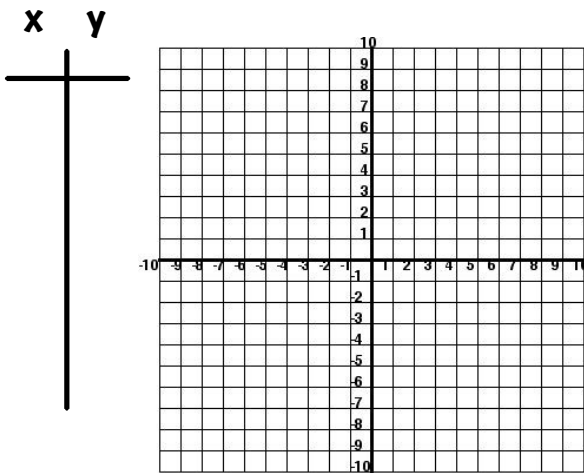




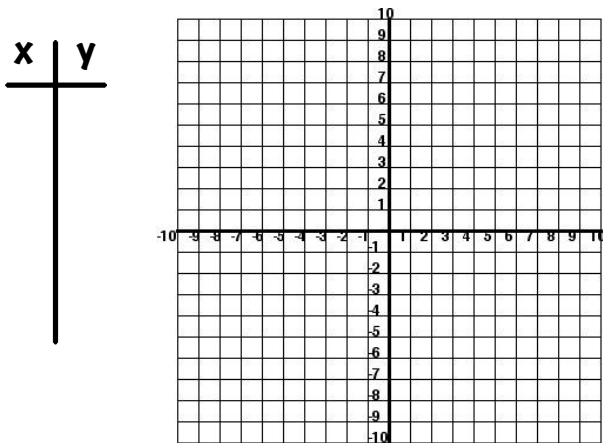
**Example 2** Graph the following exponential functions.

a)  $y = 2(1/4)^x$

b)  $y = -3(2/5)^x$



**EXAMPLE 3** Graph  $y = 3(1/2)^{x+1}$ . State the domain & range.



Domain: \_\_\_\_\_

Range: \_\_\_\_\_

**EXAMPLE 4** A new snowmobile costs \$4200. The value of the snowmobile decreases by 10% each year.

a) Write an exponential decay model giving the snowmobile's value  $y$  (in dollars) after  $t$  years.

b) Graph.

c) Estimate the value after 3 years.

d) Use the graph to estimate when the value of the snowmobile will be \$2500.

