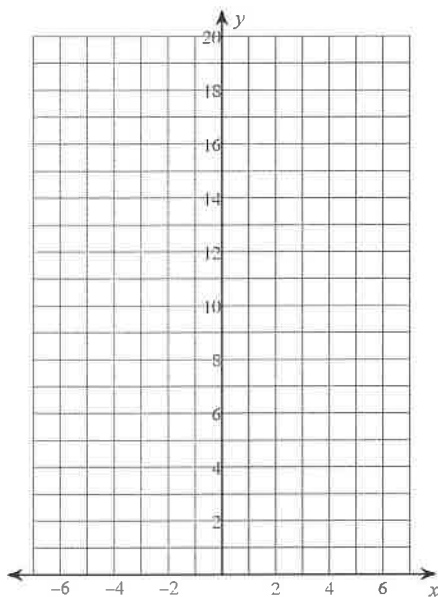


## Graphing Exponential Functions from Algebra 2

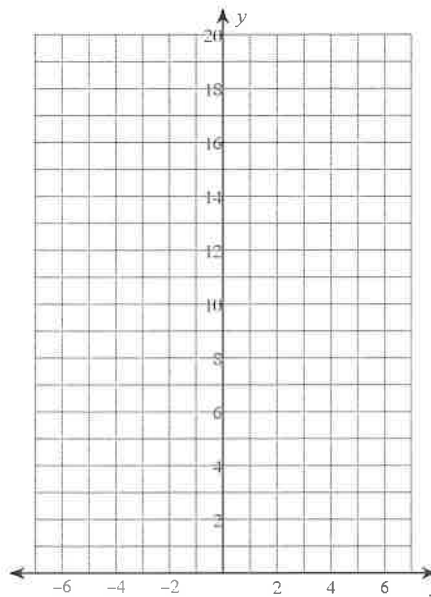
Sketch the graph of each function. Write out each transformation in words--how is the graph moving?

Last year we learned to use two points,  $(0, a)$  and  $(1, ab)$ , to graph the exponential functions. If you remember that, then please use that to graph. If you don't remember, then use a table of values.

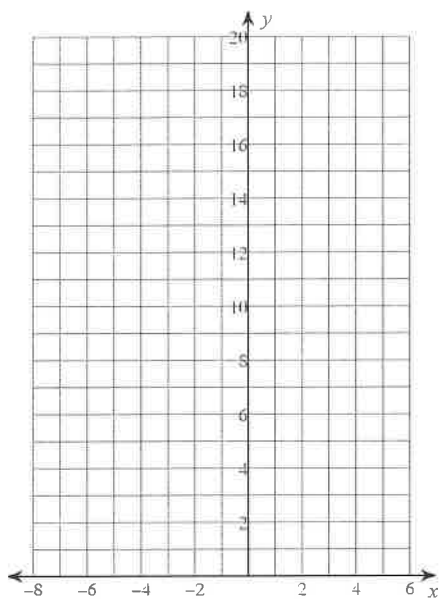
1)  $f(x) = 4 \cdot \left(\frac{1}{2}\right)^x$



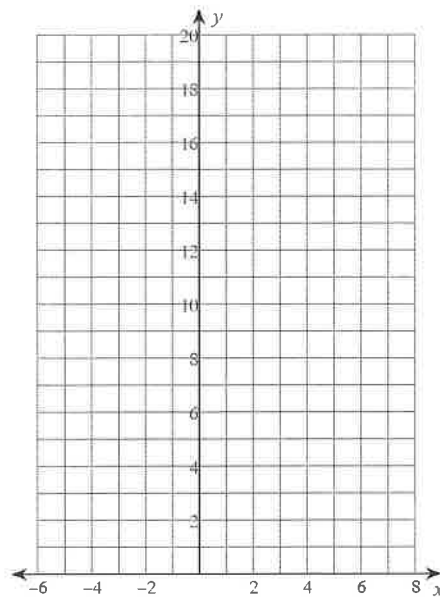
2)  $f(x) = 2 \cdot 3^x$



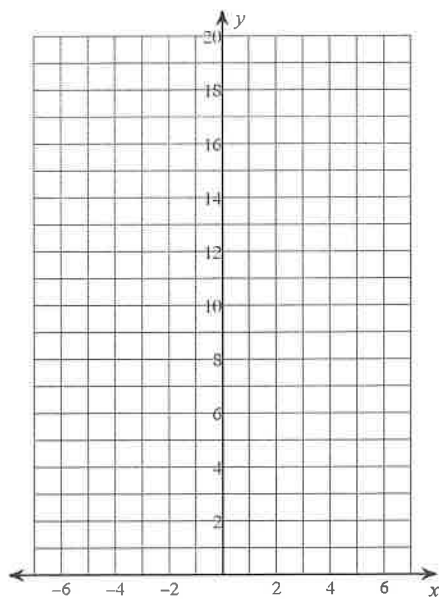
$$3) y = 4 \cdot \left(\frac{1}{2}\right)^{x+1}$$



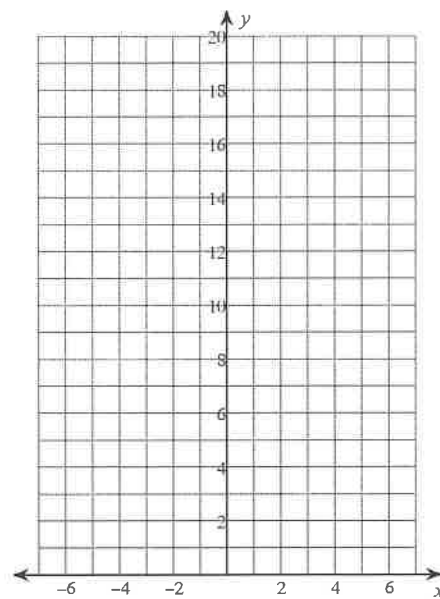
$$4) y = 3 \cdot 2^{x-1}$$



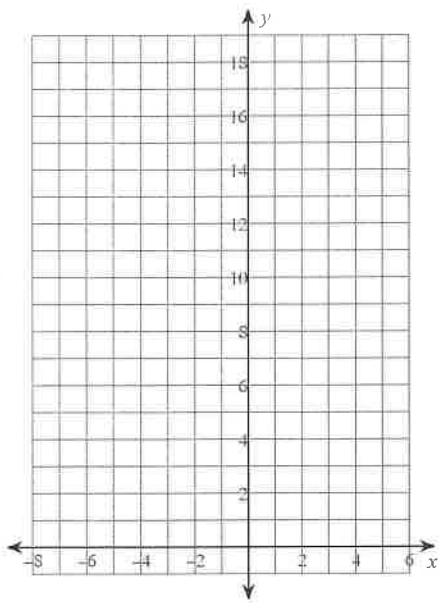
$$5) y = \frac{1}{2} \cdot 4^x + 2$$



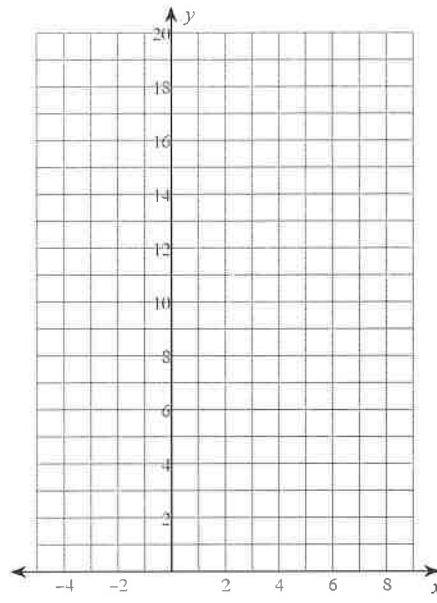
$$6) y = 4 \cdot 2^x + 1$$



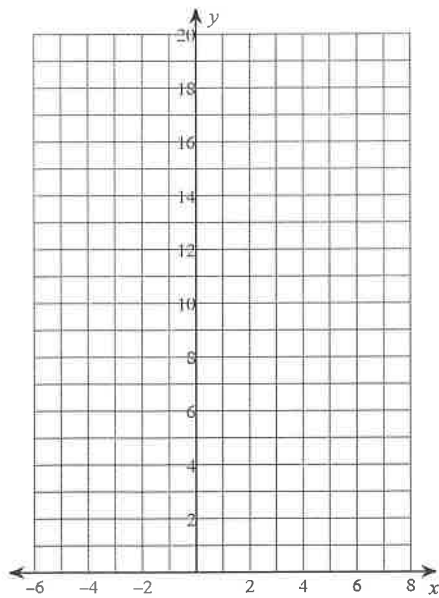
$$7) f(x) = 3^{x+1} - 1$$



$$8) f(x) = 2^{x-2} + 2$$



$$9) y = 4 \cdot \left(\frac{1}{2}\right)^{x-1} + 1$$



$$10) y = -\frac{1}{2} \cdot 2^{x+1} - 1$$

