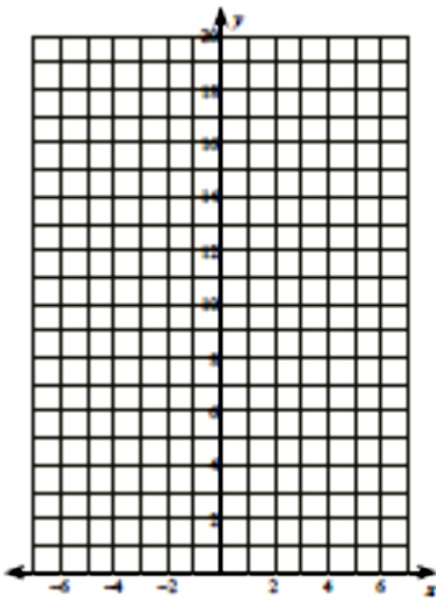
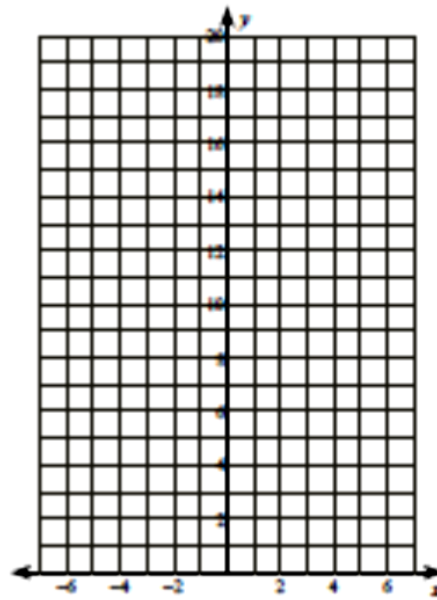


Sketch the graph of each function.

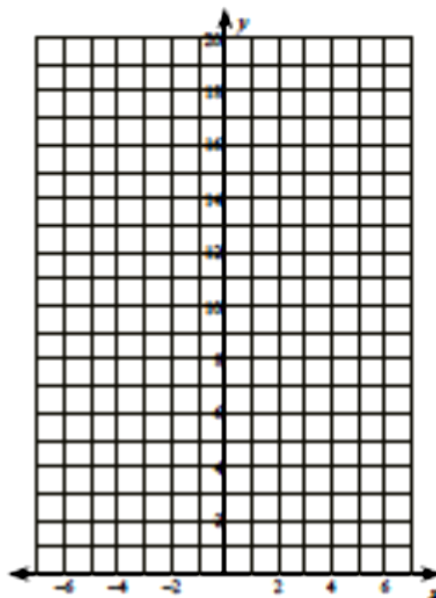
1) $y = 4 \cdot 2^x$



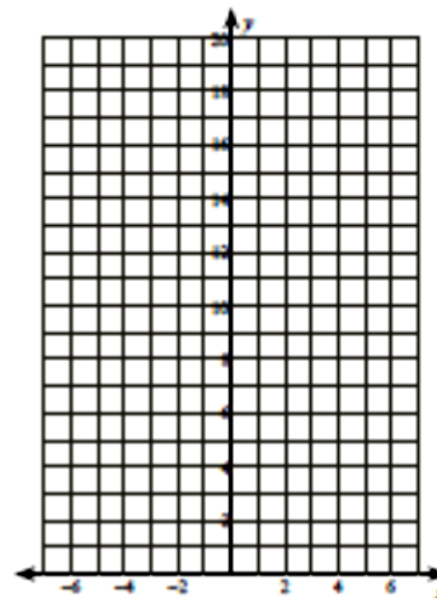
2) $y = 5 \cdot 2^x$



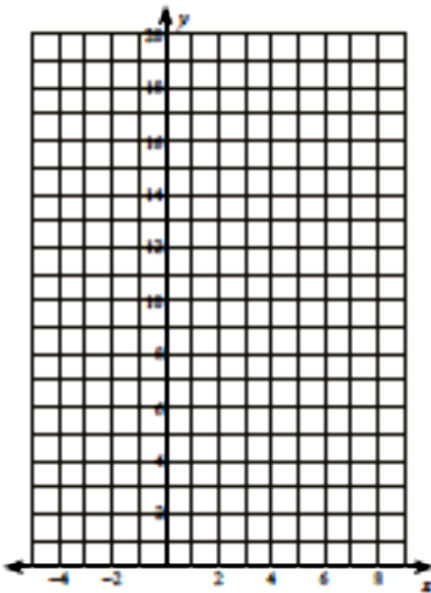
3) $y = 4 \cdot \left(\frac{1}{2}\right)^x$



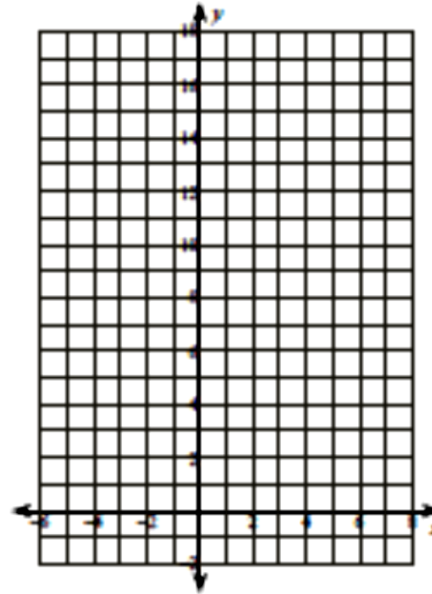
4) $y = 2 \cdot \left(\frac{1}{2}\right)^x$



5) $y = 3 \cdot 2^{x-2} + 2$



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



7. Describe in your own words what happens to the graph of $f(x) = \log_2 x$ under the given transformations, then graph.

Base Graph: $f(x) = \log_2 x$	$f(x) = \log_2(x) + 3$	$f(x) = \log_2(x - 2)$	$f(x) = \log_2(x - 2) + 3$
Transformations:	Transformations:	Transformations:	Transformations:
Asymptote:	Asymptote:	Asymptote:	Asymptote:
Intercept(s):	Intercept(s):	Intercept(s):	Intercept(s):
Domain:	Domain:	Domain:	Domain:
Range:	Range:	Range:	Range:

8. Describe the transformations of $y = 4 \log_x(x - 7) + 6$ from the parent function $f(x) = \log_2 x$.

9. Describe the transformations of $y = -\frac{1}{5} \log_{10}(x + 3) - 2$ from the parent function $f(x) = \log_{10} x$.