

Transformations of Exponential Functions

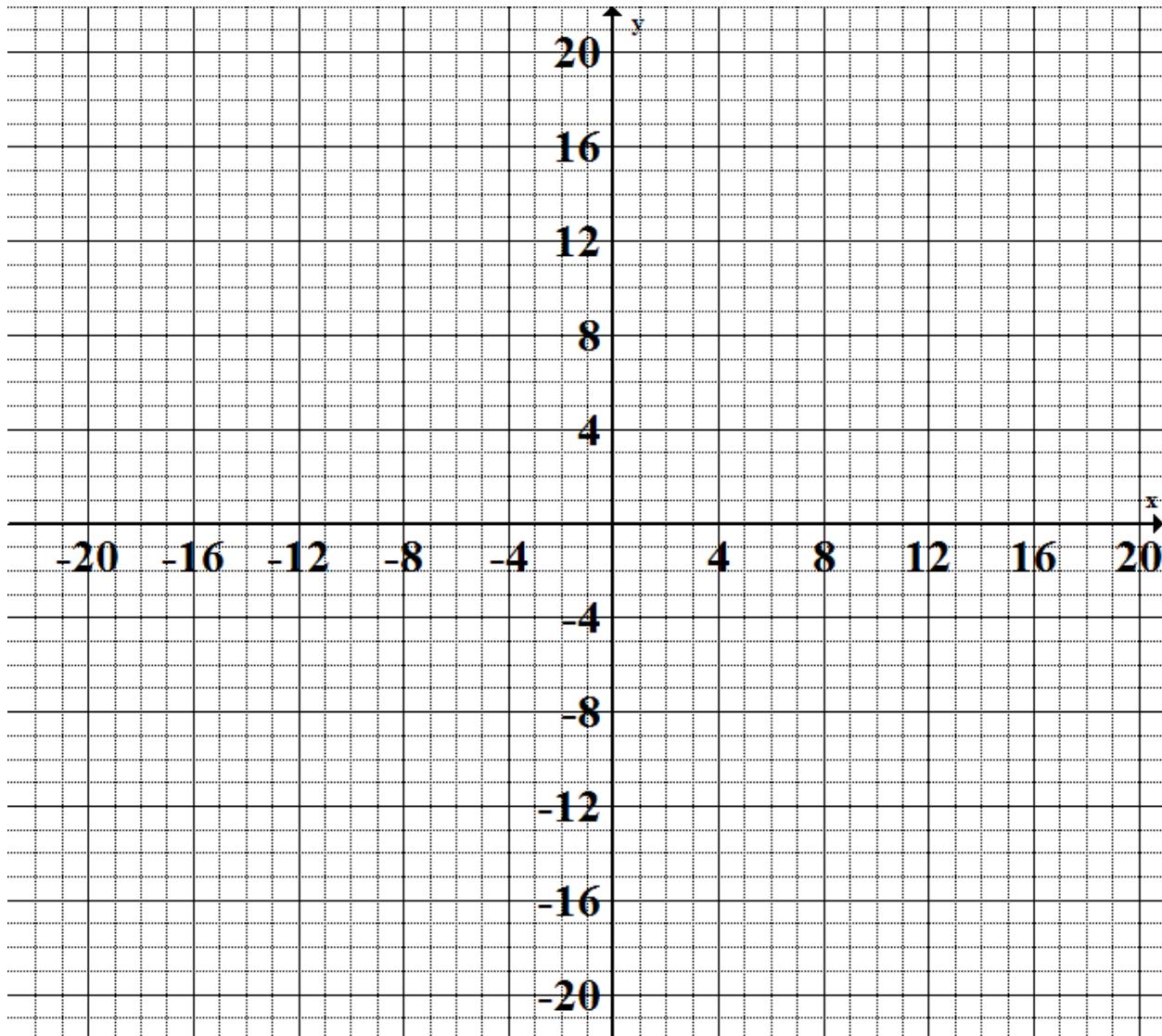
$$f(x) = b^x$$

$$f(x) = 0.5^x$$

$$f(x) = -0.5^x$$

$$f(x) = 2^x$$

$$f(x) = -2^x$$



$$g(x) = a \times b^{k(x-d)} + c$$

a	c
k	d

$$g(x) = a \times b^{k(x-d)} + c$$

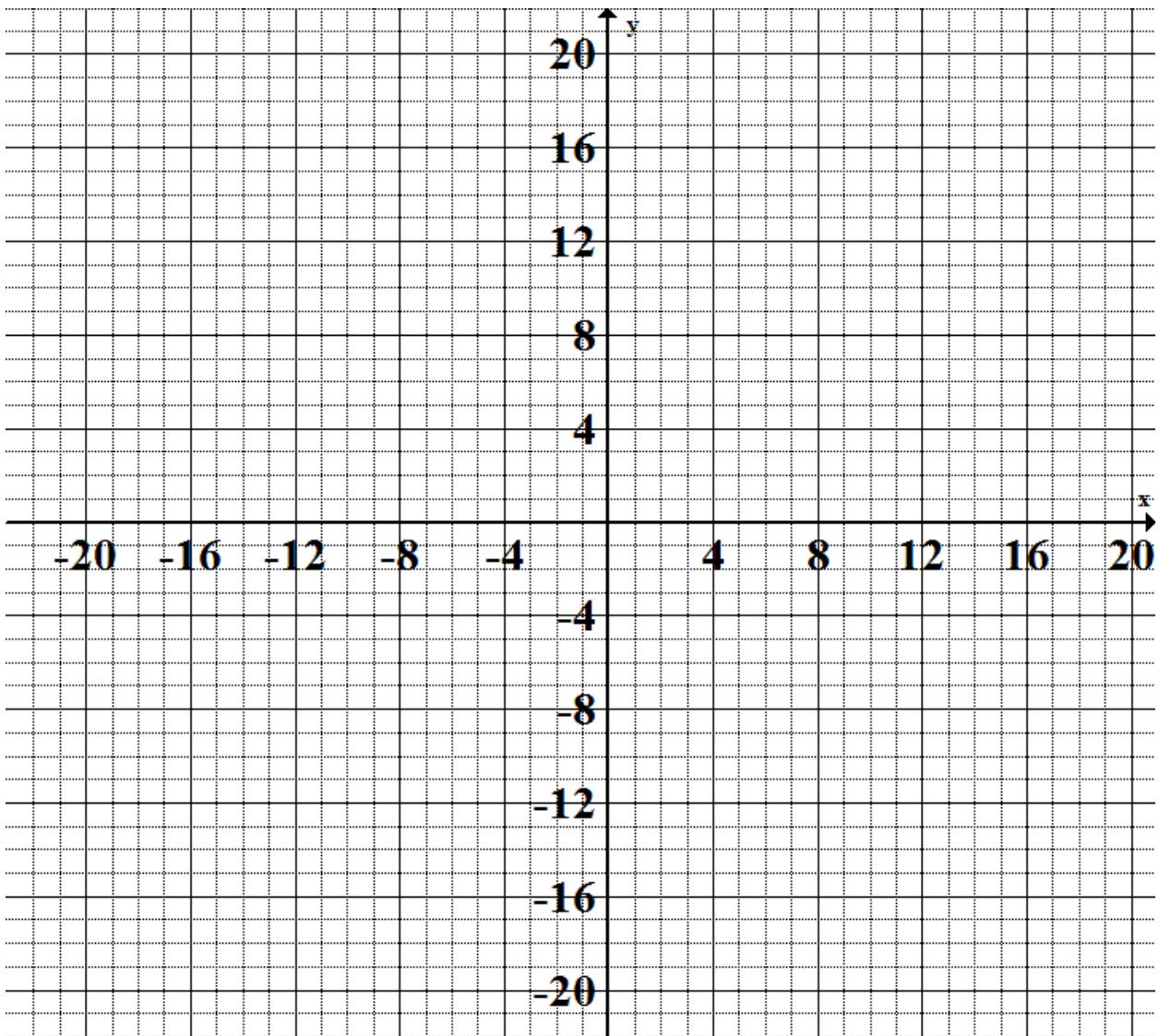
$$g(x) = 2^x - 20$$

$$g(x) = -0.5(2^x)$$

$$g(x) = 2^{x-10}$$

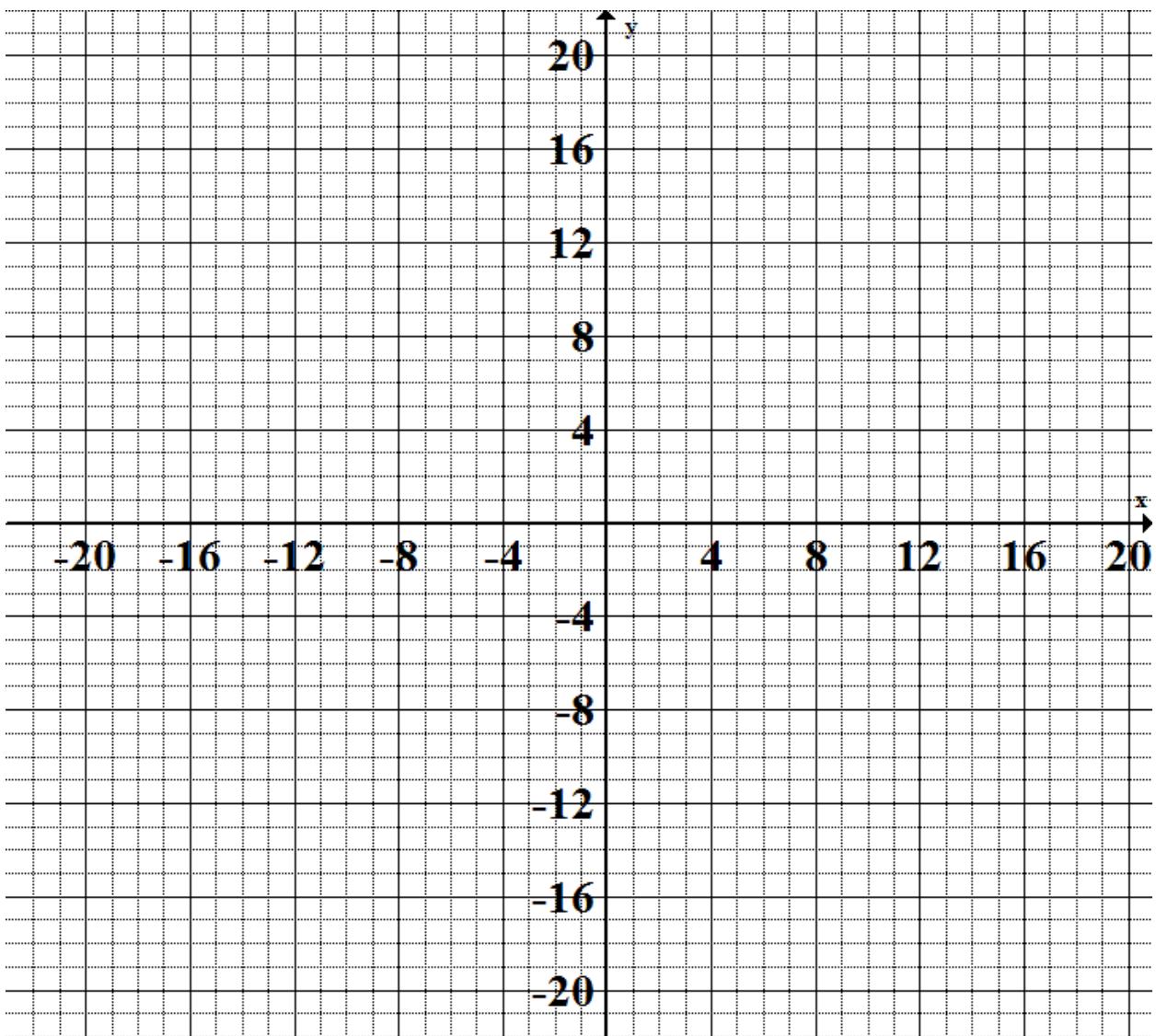
$$g(x) = 2^{3x}$$

$$g(x) = 3(2^x)$$



$$g(x) = -0.25(2^{-2(x+12)}) + 16$$

Steps to Graphing:



$$g(x) = -\frac{1}{10} \times 5^{3x-9} + 10$$

Steps to Graphing:

