

Warm up: Review of Function Transformation

Important Topics of this Section

Graphs of exponential functions

Intercept

Growth factor

Exponential Growth

Exponential Decay

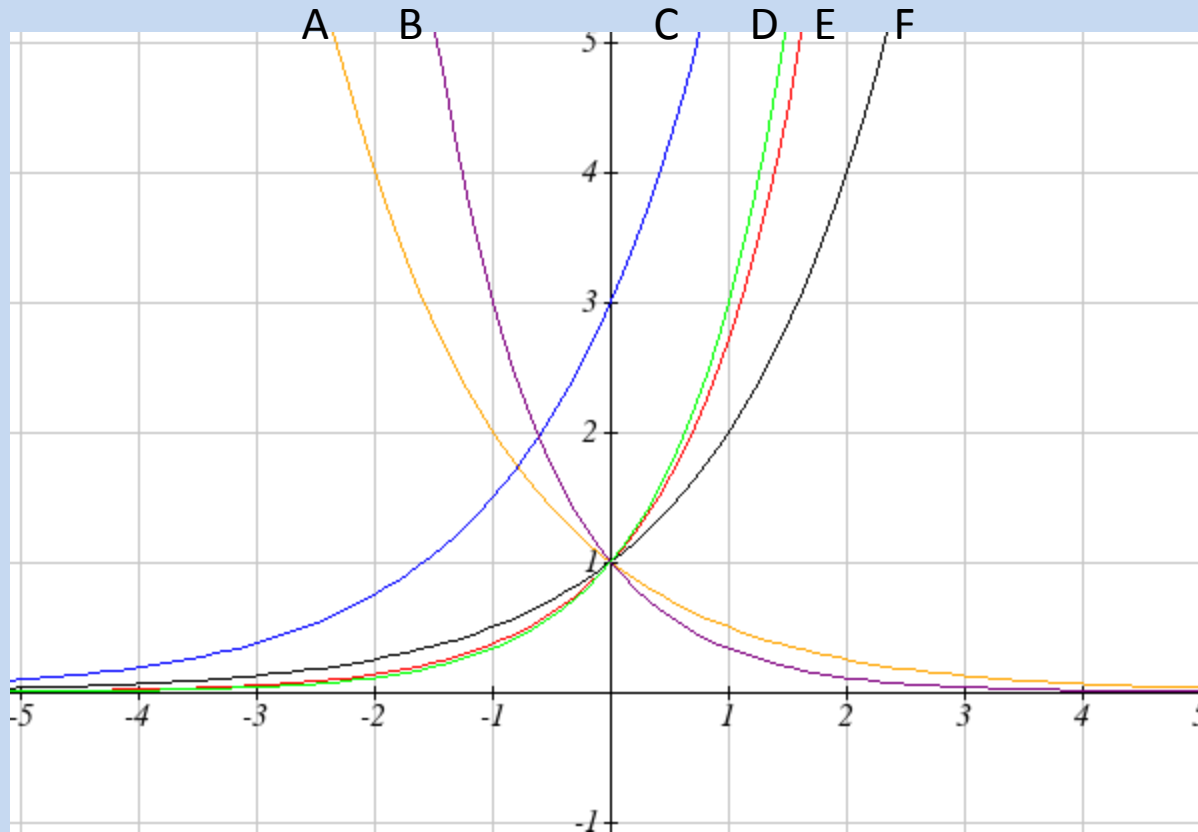
Horizontal intercepts

Long run behavior

Transformations

Match the functions below to the graph.

$$2^x, 3(2)^x, 3^x, e^x, \left(\frac{1}{2}\right)^x, \left(\frac{1}{3}\right)^x$$



Transformations of Exponentials

Any transformed exponential can be written in the form

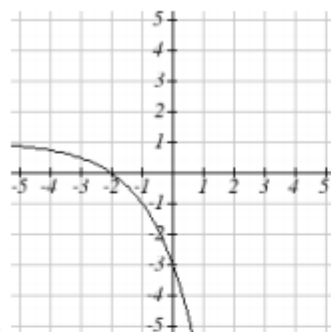
$$f(x) = ab^x + c$$

where

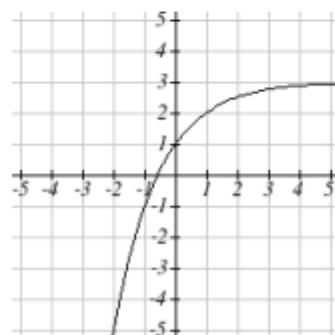
$y = c$ is the horizontal asymptote.

Find a formula for each function graphed as a transformation of $f(x) = 2^x$.

29.



31.



Write an equation for the following graph.

