

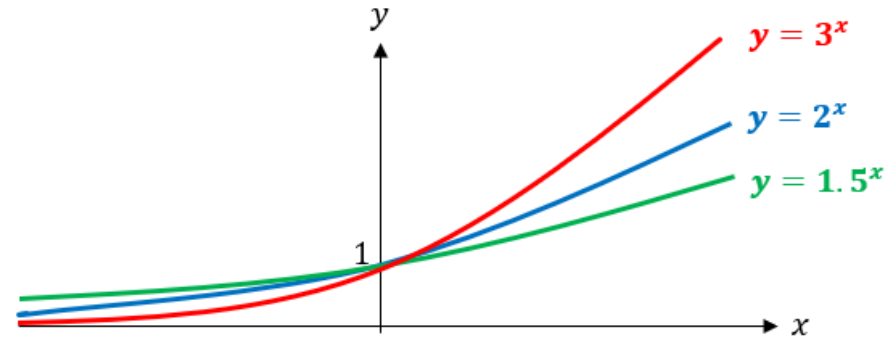
14.1) Exponential functions

Worked example

On the same axes, sketch $y = 4^x$, $y = 5^x$ and $y = 3.5^x$

Your turn

On the same axes, sketch $y = 2^x$, $y = 3^x$ and $y = 1.5^x$

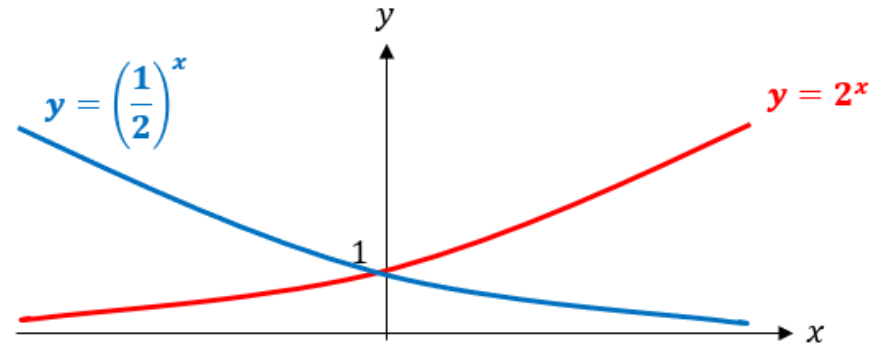


Worked example

On the same axes, sketch $y = 3^x$ and $y = \left(\frac{1}{3}\right)^x$

Your turn

On the same axes, sketch $y = 2^x$ and $y = \left(\frac{1}{2}\right)^x$

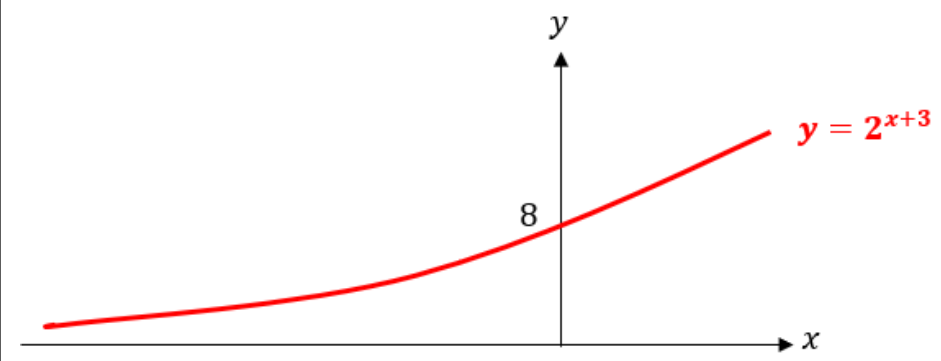


Worked example

Sketch $y = 3^{x-2}$

Your turn

Sketch $y = 2^{x+3}$



Worked example

The graph of $y = ka^x$ passes through the points $(4, \frac{16}{3})$ and $(0, \frac{1}{3})$

Find the values of the constants k and a

Your turn

The graph of $y = pq^x$ passes through the points $(2, 4.5)$ and $(5, \frac{243}{2})$

Find the values of the constants p and q

$$p = \frac{1}{2}, q = 3$$