MCS-122

Derivative Formulas

Give the derivative with respect to $x$ of each of the following functions of $x$. Note that $n$ stands for a real number, $e$ is the natural base (approx. 2.718), $\ln x$ is the natural log function and $\log x$ is the log base 10 function.

1. $x^n$

2. $e^x$

3. $x^n$

4. $n^x$

5. $\sqrt{x}$

6. $\frac{1}{\sqrt{x}}$

7. $\ln x$

8. $\log x$

9. $\sin x$

10. $\cos x$

11. $\tan x$