

### CHANGE OF BASE LAW:

On the calculator, we can type using logs with base 10 or base e, i.e.  $\log_{10}$  and  $\log_e$ . To solve questions on the calculator, we use the change of base rule:

$$\log_b x = \frac{\log_a x}{\log_a b}$$

#### 4.5 WORKED EXAMPLE

Expand the following expression:

$$\log_2 x(x+1)$$

