

### 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:

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

#### 4.1 WORKED EXAMPLE

Prove the change of base law.

#### 4.2 WORKED EXAMPLE

Simplify and evaluate  $\log_{25} 5$ .

