## Using a calculator with logs

Use your calculator to find the following (write 3 significant figures):

| $\log (1)$ | $\log \left(10^{-2}\right)$ | $\log (\sqrt{10})$ |
| :--- | :--- | :--- |
| $\log (2)$ | $\log \left(2^{2}\right)$ | $\log \left(2^{3}\right)$ |
| $\log (2 \times 2)$ | $\log (\sqrt{2})$ | $\log \left(2^{(1 / 3)}\right)$ |
| $\log (4)$ | $\log \left(4^{1 / 2}\right)$ | $\log \left(4^{1 / 6}\right)$ |


| $e^{1}$ | $e^{2}$ | $e^{-2}$ |
| :--- | :--- | :--- |
| $\ln (1)$ | $\ln (10)$ | $\ln (100)$ |
| $\ln (e)$ | $\ln (\sqrt{e})$ | $\ln \left(e^{e}\right)$ |

(The last two questions are not about using a calculator)
Write these equations using powers, e.g. $\log _{3} 81=4 \rightarrow 3^{4}=81$

$$
\log _{7} 7=1 \quad \log _{3} 1=0 \quad \log _{4}\left(\frac{1}{64}\right)=-3
$$

Write these equations using logs, e.g. $8^{2}=64 \rightarrow \log _{8} 64=2$

$$
10^{3}=1000 \quad 4^{-2}=\frac{1}{16} \quad x^{z}=y
$$

