| | | |
|---|---|---|
| **2** | States or uses,<br>$\sin(-x) \equiv -\sin x$<br>$\cos(-x) \equiv \cos x$ | M1 |
| | $f(-x) = \dfrac{e^{\sin(-x) + \cos(-x)}}{e^{\sin(-x) - \cos(-x)}}$ | M1 |
| | $f(-x) = \dfrac{e^{-\sin x + \cos x}}{e^{-\sin x - \cos x}}$ | M1 |
| | $f(-x) = \dfrac{e^{-\sin x + \cos x} \times e^{2\sin x}}{e^{-\sin x - \cos x} \times e^{2\sin x}}$ | M1 |
| | $f(-x) = \dfrac{e^{\sin x + \cos x}}{e^{\sin x - \cos x}}$ | M1 |
| | $f(-x) = f(x)$ | M1 |
| | As $f(-x) = f(x)$, the function must be even | A1 |
| | | **[7]** |
| | | **[7 marks]** |