07	1c	Rationalise the denominator of $\frac{1}{\sqrt{3}-1}$.	2

$$\frac{1}{\sqrt{3}-1} = \frac{1}{\sqrt{3}-1} \times \frac{\sqrt{3}+1}{\sqrt{3}+1}$$
$$= \frac{\sqrt{3}+1}{3-1}$$
$$= \frac{\sqrt{3}+1}{2}$$

* These solutions have been provided by *projectmaths* and are not supplied or endorsed by the Board of Studies

Board of Studies: Notes from the Marking Centre

Better responses applied the correct conjugate surd. However, some candidates incorrectly multiplied by $\frac{\sqrt{3}-1}{\sqrt{3}-1}$ or $\frac{\sqrt{3}}{\sqrt{3}}$.

Source: http://www.boardofstudies.nsw.edu.au/hsc_exams/