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$$\frac{5 - \sqrt{3}}{11}$$

B1

for $\sqrt{27} = 3\sqrt{3}$

P1

for process to rationalise the denominator,

$$\text{eg } \frac{\sqrt{3} + 1}{\sqrt{27} + 4} \times \frac{\sqrt{27} - 4}{\sqrt{27} - 4} \quad \text{or} \quad \frac{\sqrt{3} + 1}{3\sqrt{3} + 4} \times \frac{3\sqrt{3} - 4}{3\sqrt{3} - 4} \quad \text{oe}$$

P1

(dep on previous P1) for expanding terms, condone one error in expansion of numerator or denominator,

$$\text{eg } \frac{\sqrt{3}\sqrt{27} - 4\sqrt{3} + \sqrt{27} - 4}{\sqrt{27}\sqrt{27} - 4\sqrt{27} + 4\sqrt{27} - 16} \quad \text{or} \quad \frac{3\sqrt{3}\sqrt{3} - 4\sqrt{3} + 3\sqrt{3} - 4}{9\sqrt{3}\sqrt{3} - 12\sqrt{3} + 12\sqrt{3} - 16}$$

A1

oe in the correct form

B1 can be awarded whenever this is seen, which might be later in the process.

Accept $a = 5, b = -1, c = 3, d = 11$