**1E Surds Introduction**

1. Simplify
2. $\sqrt{18}$
3. $\frac{\sqrt{20}}{2}$
4. $5\sqrt{6}-2\sqrt{24}+\sqrt{294}$
5. Expand and simplify if possible
6. $\sqrt{2}\left(5-\sqrt{3}\right)$
7. $\left(2-\sqrt{3}\right)\left(5+\sqrt{3}\right)$

**1F Rationalising Surds**

1. Rationalise
2. $\frac{1}{\sqrt{3}}$
3. $\frac{1}{3+\sqrt{2}}$
4. $\frac{\sqrt{5}+\sqrt{2}}{\sqrt{5}-\sqrt{2}}$
5. $\frac{1}{\left(1-\sqrt{3}\right)^{2}}$