



Leith Academy National 5 Home Learning



SURDS

NON-CALCULATOR

1) Simplify the following.

a) $\sqrt{8}$ b) $\sqrt{12}$ c) $\sqrt{20}$ d) $\sqrt{50}$ e) $\sqrt{48}$ f) $\sqrt{288}$

2) Simplify the following.

a) $\sqrt{\frac{12}{27}}$ b) $\sqrt{\frac{12}{75}}$ c) $\sqrt{\frac{18}{32}}$ d) $\sqrt{\frac{20}{45}}$ e) $\sqrt{\frac{50}{72}}$ f) $\sqrt{\frac{920}{23}}$

3) Rationalise the denominator for each of the following.

a) $\frac{1}{\sqrt{2}}$ b) $\frac{3}{\sqrt{2}}$ c) $\frac{9}{\sqrt{3}}$ d) $\frac{10}{\sqrt{6}}$ e) $\frac{12}{5\sqrt{6}}$ f) $\frac{\sqrt{3}}{2\sqrt{12}}$