Surds Revision

(a)	**(b)**	**(c)**	**(d)**
Write $\sqrt{108}$ in the form $k\sqrt{3}$	Write $\sqrt{45}+\sqrt{20}$ in the form $k\sqrt{5}$	Write $\sqrt{96}-\sqrt{24}$ in the form $k\sqrt{6}$	Expand $\sqrt{2}(5+\sqrt{8})$
(e)	**(f)**	**(g)**	**(h)**
Expand and simplify $(7+\sqrt{3})(4-\sqrt{3})$	Expand and simplify $(5+2\sqrt{2})(6-\sqrt{2})$	Expand and simplify $(5+3\sqrt{2})^2$	Rationalise the denominator and simplify fully $\dfrac{15}{\sqrt{18}}$
(i)	**(j)**	**(k)**	**(l)**
Rationalise the denominator and simplify fully $\dfrac{5+4\sqrt{3}}{\sqrt{3}}$	Express $\dfrac{\sqrt{3}+\sqrt{27}}{\sqrt{2}}$ as a single surd.	Rationalise the denominator and simplify fully $\dfrac{\sqrt{3}+5}{2-\sqrt{3}}$	$(4+\sqrt{a})(7-\sqrt{a})=23+k\sqrt{a}$ Find the values of the positive integers a and k.