

Manipulating Surds

(a) Simplify $2\sqrt{5} + 3\sqrt{5}$ $5\sqrt{5}$	(b) Simplify $6\sqrt{5} + 5\sqrt{5}$ $11\sqrt{5}$	(c) Simplify $2\sqrt{5} - 3\sqrt{5}$ $-\sqrt{5}$	(d) Simplify $7\sqrt{3} - 3\sqrt{3}$ $4\sqrt{3}$
(e) Simplify $2\sqrt{3} + 3\sqrt{2}$ $2\sqrt{3} + 3\sqrt{2}$	(f) Simplify $7\sqrt{10} + 3\sqrt{10} - \sqrt{10}$ $9\sqrt{10}$	(g) Expand $3(6 + \sqrt{5})$ $18 + 3\sqrt{5}$	(h) Expand $\sqrt{2}(7 - \sqrt{3})$ $7\sqrt{2} - \sqrt{6}$
(i) Expand $5\sqrt{2}(3 - \sqrt{7})$ $15\sqrt{2} - 5\sqrt{14}$	(j) Expand and simplify $(3 + \sqrt{2})(6 + \sqrt{2})$ $20 + 9\sqrt{2}$	(k) Expand and simplify $(3 + \sqrt{7})(5 - \sqrt{7})$ $8 + 2\sqrt{7}$	(l) Expand and simplify $(4 + 3\sqrt{5})(2 - \sqrt{5})$ $-7 + 2\sqrt{5}$