Add the following radicals, making them **like radicals** by previously extracting all possible factors (as shown in the example):

a) $\sqrt{2} + \sqrt{8} + \sqrt{18} - \sqrt{32} = \sqrt{2} + \sqrt{2^3} + \sqrt{3^2 2} - \sqrt{2^5} = \sqrt{2} + 2\sqrt{2} + 3\sqrt{2} - 2^2\sqrt{2} = \sqrt{2} + 2\sqrt{2} + 3\sqrt{2} - 4\sqrt{2} = \boxed{2\sqrt{2}}$

FACTORISE RADICANDS   EXTRACT FACTORS   ADD LIKE RADICALS

b) $\sqrt{5} + \sqrt{45} + \sqrt{180} - \sqrt{80} = \sqrt{}$

c) $\sqrt{24} - 5\sqrt{6} + \sqrt{486} = \sqrt{}$

d) $27\sqrt{3} - 5\sqrt{27} - 9\sqrt{12} = \sqrt{}$

e) $2\sqrt{8} + 5\sqrt{72} - 7\sqrt{18} - \sqrt{50} = \sqrt{}$