1) $A = \left(3\sqrt{2} + 5\right)^2 = \left(3\sqrt{2}\right)^2 + 2 \times 3\sqrt{2} \times 5 + 5^2 = 3^2 \times \left(\sqrt{2}\right)^2 + 30\sqrt{2} + 25 = 9 \times 2 + 30\sqrt{2} + 25$.

$A = \left(18 + 25\right) + 30\sqrt{2} = 43 + 30\sqrt{2}$.

2) $B = \left(\sqrt{7} + 3\right)\left(\sqrt{7} - 3\right) = \left(\sqrt{7}\right)^2 - 3^2 = 7 - 9 = -2$.