1. a) $x^2 + \frac{5}{2}x - \frac{1}{2} = 0 \,/\, 2$

$2x^2 + 5x - 1 = 0$

$x_{1,2} = \frac{-5 \pm \sqrt{5^2 - 4 \cdot 2 \cdot (-1)}}{2 \cdot 2}$

$x_{1,2} = \frac{-5 \pm \sqrt{25+8}}{4}$

$x_{1,2} = \frac{-5 \pm \sqrt{33}}{4}$

$x_1 = \frac{-5 + \sqrt{33}}{4}$

$x_2 = \frac{-5 - \sqrt{33}}{4}$

b) $x^2 + (a+b)x - a = 0$

$x_{1,2} = \frac{-(a+b) \pm \sqrt{(a+b)^2 - 4 \cdot 1 \cdot (-1)}}{2 \cdot 1}$

$x_{1,2} = \frac{-a-b \pm \sqrt{a^2+2ab+b^2+4}}{2}$

$x_1 = \frac{-a-b-\sqrt{a^2+2ab+b^2+4}}{2} \,/^2$

$x_1^2 = \frac{a^2+b^2-(a^2+2ab+b^2+4)}{4}$

$x_1^2 = \frac{a^2+b^2-a^2-2ab-b^2-4}{4}$

$x_1^2 = \frac{-2ab-4}{4}$

$x_1^2 = \frac{-2(ab+2)}{4}$

$x_1^2 = -\frac{ab+2}{4} \,/\sqrt{}$

$x_1 = \frac{\sqrt{ab+2}}{2} i$

$x_2 = \frac{-a-b+\sqrt{a^2+2ab+b^2+4}}{2} \,/^2$

$x_2^2 = \frac{a^2+b^2+a^2+2ab+b^2+4}{4}$

$x_2^2 = \frac{2a^2+2b^2+2ab+4}{4}$

$x_2^2 = \frac{2(a^2+b^2+ab+2)}{4}$

$x_2^2 = \frac{a^2+b^2+ab+2}{2}$

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