(6) Given, $\frac{a^2+b}{b^2-a} = k_1$ (Integer)

$$\frac{b^2+a}{a^2-b} = k_2 \text{ (Integer)}$$

$$a^2+b = k_1b^2 - k_1a \longrightarrow (1)$$

$$b^2+a = k_2a^2 - k_2b \longrightarrow (2)$$

$(1)+(2) \Rightarrow$ $a^2+b^2+a+b = k_2a^2+k_1b^2-k_1a-k_2b$

$a(k_1+1) + b(k_2+1)$

$= a^2(k_2-1) + b^2(k_1-1)$

By the above equations, $\boxed{a=1, b=2}$