

$$\begin{pmatrix} a-b \\ 2a-b \end{pmatrix} - \begin{pmatrix} a^2+b^2+a \\ 2a^2+ab-b^2 \end{pmatrix} = \begin{pmatrix} b^2+b+ab+a \end{pmatrix}$$

$$(4b^4+4ab^2+a^2):(2b^2+a)$$

$$\begin{pmatrix} a-b \\ 2a-b \end{pmatrix} - \begin{pmatrix} a^2+b^2+a \\ (2a-b)(a+b) \end{pmatrix} = \begin{pmatrix} (b+1)(a+b) \end{pmatrix}$$

$$(2b^2+a)^2:(2b^2+a)$$

Handwritten notes:

$$\frac{a}{b} = \frac{a \cdot c}{b \cdot c} \implies a = \frac{b}{c} = a \cdot \frac{c}{b}$$

$$\frac{a}{b} = \frac{a \cdot 1}{b \cdot 1} \implies a = \frac{a \cdot 1}{b \cdot 1} = \frac{a}{b}$$

$1 \cdot x^2 - 5x + 6 = 1 \cdot (x-x_1)(x-x_2)$
 x_1, x_2
 $2a^2 + ab - b^2 = b^2(2a^2/b^2 + ab/b^2 - b^2/b^2) = b^2(2(a/b)^2 + (a/b) - 1)$
 пусть $a/b = x$
 $2x^2 + x - 1$
 $d = b^2 - 4ac = 1 - 4 \cdot 2 \cdot (-1) = 1 + 8 = 9$
 $x_1 = (-b + \sqrt{d})/2a = (-1 + 3)/(2 \cdot 2) = 2/4 = 0,5 = 1/2$
 $x_2 = (-1 - 3)/(2 \cdot 2) = -4/4 = -1$
 $(x - 1/2)(x + 1) = (2x - 1)(x + 1) = (2(a/b) - 1)(a/b + 1) = (2(a/b) - b/b) \cdot (a/b + b/b) = ((2a - b)(a + b))/b^2$
 $2a^2 + ab - b^2 = b^2 \cdot [((2a - b)(a + b))/b^2] = (2a - b)(a + b)$
 $4b^4 + 4ab^2 + a^2 = (2b^2 + a)^2$
 $b^2 + b + ab + a = b(b + 1) + a(b + 1) = (b + 1)(a + b)$

$$\begin{pmatrix} (a-b)(a+b) - (a^2+b^2+a) \\ (2a-b)(a+b) \\ (2b^2+a) \end{pmatrix} = \begin{pmatrix} (b+1)(a+b) \end{pmatrix}$$

$$\begin{pmatrix} a^2 - b^2 - a^2 - b^2 - a \\ (2a-b)(a+b)(2b^2+a) \end{pmatrix} = \begin{pmatrix} (b+1)(a+b) \end{pmatrix}$$

$$\begin{pmatrix} -2b^2 - a \\ (2a-b)(a+b)(2b^2+a) \end{pmatrix} = \begin{pmatrix} (b+1)(a+b) \end{pmatrix}$$

$$\begin{pmatrix} -(1)(b+1)(a+b) \\ (2a-b)(a+b) \end{pmatrix}$$

$$\begin{pmatrix} b+1 \\ b-2a \end{pmatrix}$$