$e_1 = -a(x_1)^2 - bx_1 - c + y_1$

$x = (-4, 0, 4)$
$y = (30, 2, 6)$

$e_1 = -a(-4)^2 - b(-4) - c + 30$
$= -a(16) + 4b - c + 30$
$= -16a + 4b - c = -30$
$16a - 4b + c = 30$

$e_2 = -a(0)^2 - b(0) - c + 2$
$= -c + 2$
$c = +2$

$e_3 = -a(4)^2 - b(4) - c + 6$
$= -a(16) - 4b - c + 6$
$= -16a - 4b - c + 6$
$-6 = -16a - 4b - c$
$6 = 16a + 4b + c$
$6 = 16a + 4b + 2$
$4 = 16a + 4b$

1) $16a - 4b + c = 30$
2) $c = 2$
3) $16a + 4b - 4 = 0$

$-16a - 4b = 28$
$16a + 4b = 4$

$a = \frac{28 + 4b}{16}$

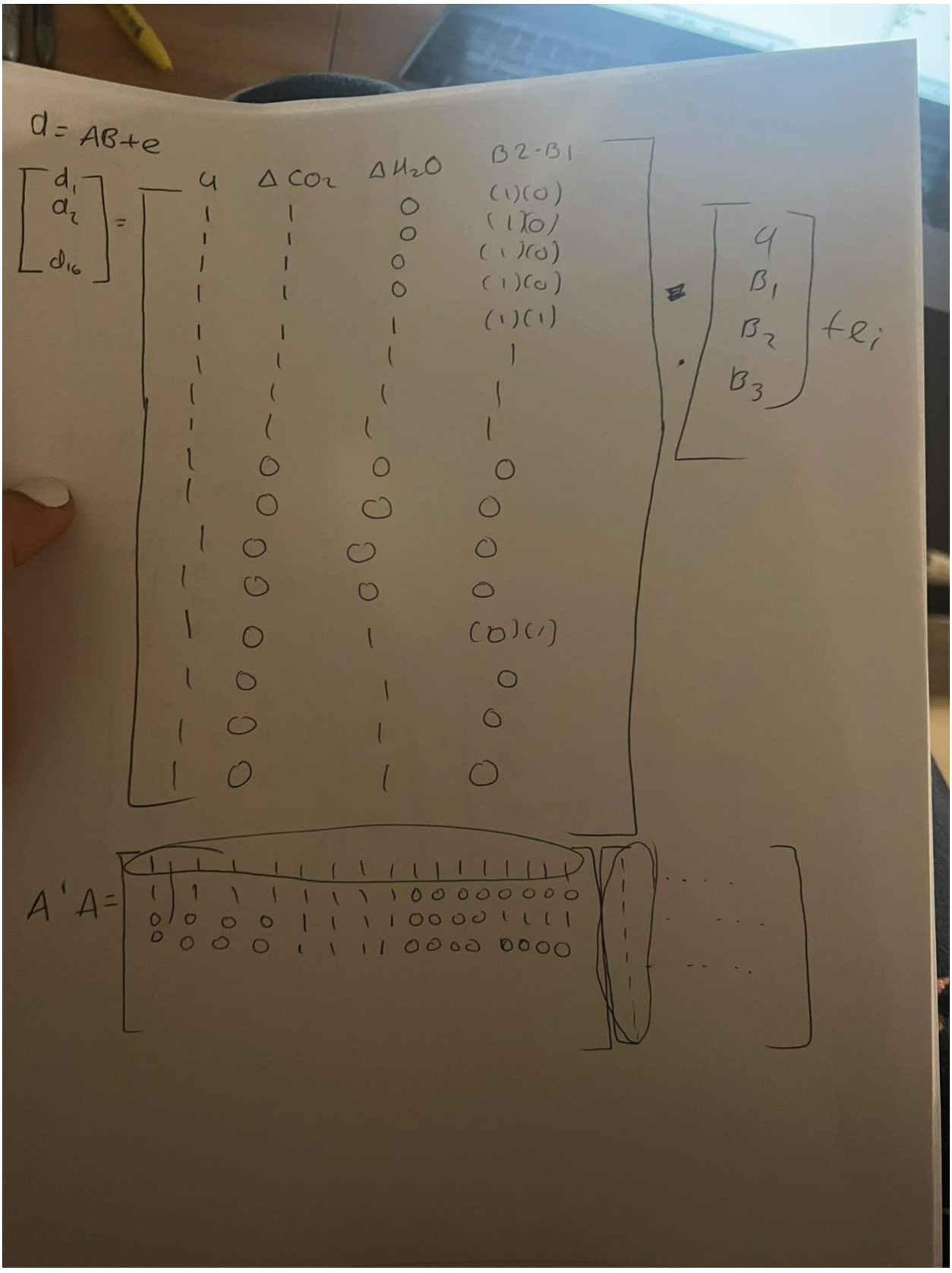
$\left(\frac{28+4b}{16}\right) + (4b) = 4$

$\frac{14}{8}$

$\frac{7}{4} + \frac{b}{4} + 4b = 4$
$\frac{b}{4} + 4b = 4 - \frac{7}{4}$
$\frac{b}{4} \times 4 + 4b \times 4 = \frac{9}{4} \times 4$
$\frac{b}{4} = \frac{9}{4} - 4b$
$b + 16b = 9$
$17b = 9$
$b = \frac{9}{17}$

$\frac{16}{4} - \frac{7}{4} = \frac{9}{4}$

$c = 2 \quad b = 9/17$
$16a - 4(9/17) + 2 = 30$
$a = 1.88$


d = AB+e
[d1 d2 ... d16] =
4 ΔCO2 ΔH2O B2-B1
(1)(0)
(1)(0)
(1)(0)
(1)(0)
(1)(1)
(0)(1)
= [4 B1 B2 B3] + ei
A'A =

$$= \begin{bmatrix} 16 & 8 & 8 & 4 \\ 8 & 8 & 4 & 4 \\ 8 & 4 & 8 & 4 \\ 4 & 4 & 4 & 4 \end{bmatrix}$$

$$d = AB + e_i$$

explicit $d \cdot A' =$

$$= \left(A \left(\begin{bmatrix} 4 \\ B_1 \\ B_2 \\ B_3 \end{bmatrix} + e_i \right) \right) A'$$

$$= \begin{bmatrix} 16 & 8 & 8 & 4 \\ 8 & 8 & 4 & 4 \\ 8 & 4 & 8 & 4 \\ 4 & 4 & 4 & 4 \end{bmatrix} \begin{bmatrix} 4 \\ B_1 \\ B_2 \\ B_3 \end{bmatrix} + \begin{bmatrix} 16e_i & 8e_i & 8e_i & 4e_i \\ 8e_i & 8e_i & 4e_i & 4e_i \\ 8e_i & 4e_i & 8e_i & 4e_i \\ 4e_i & 4e_i & 4e_i & 4e_i \end{bmatrix}$$

$$= d \cdot A'$$