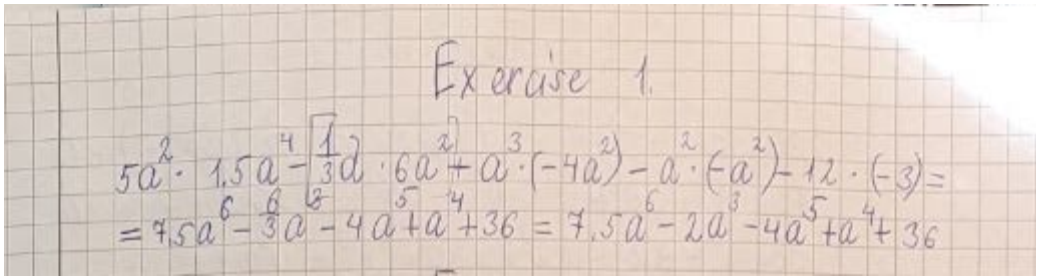
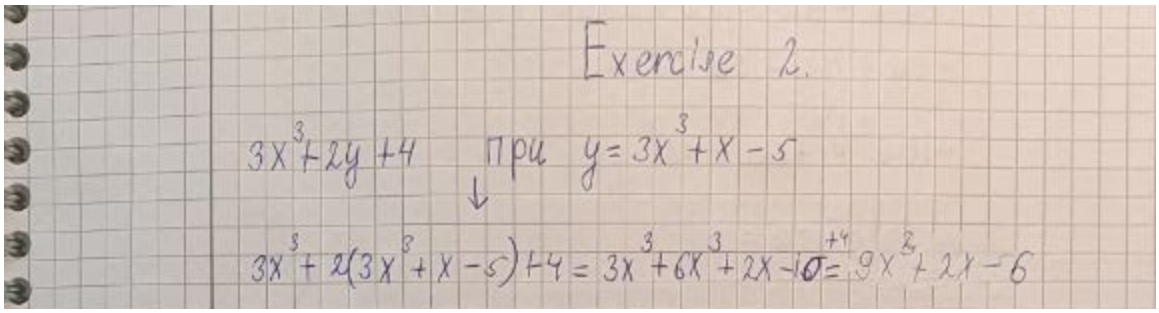
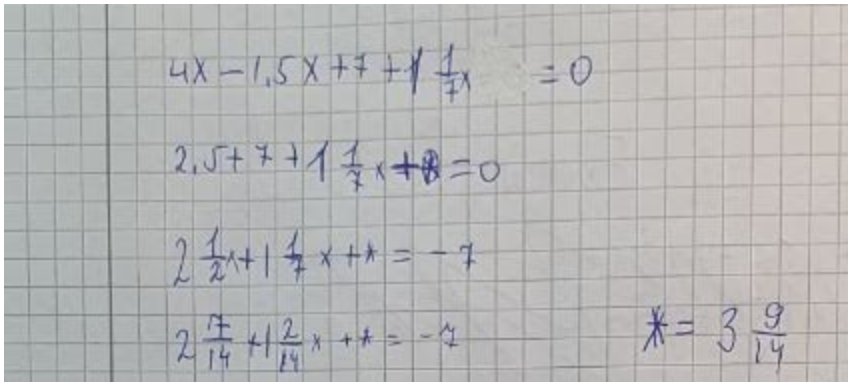
Exercise 1



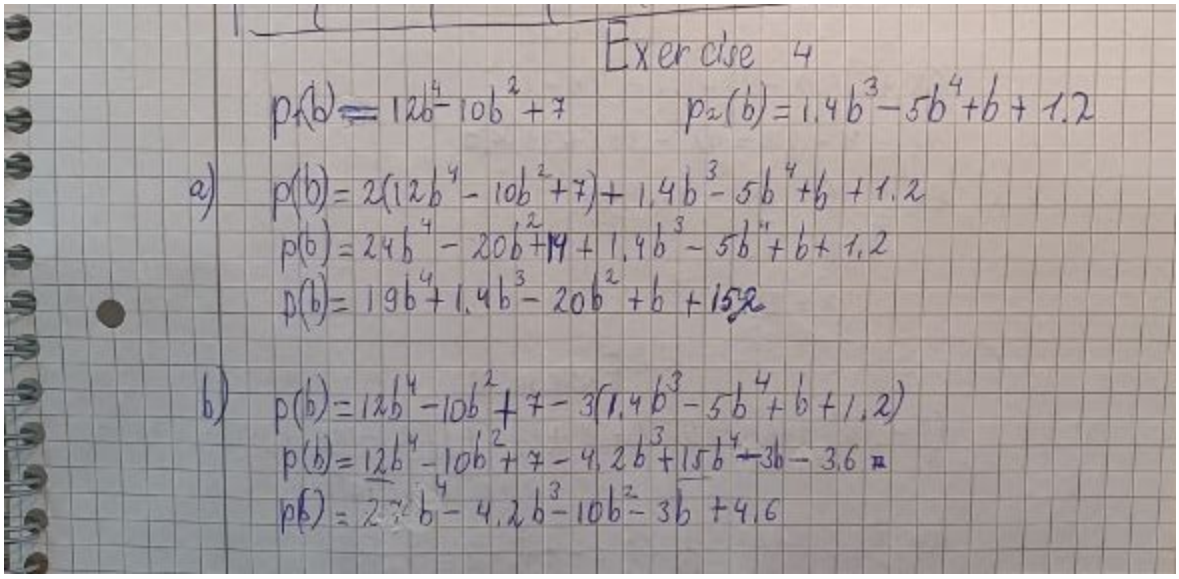
Exercise 2



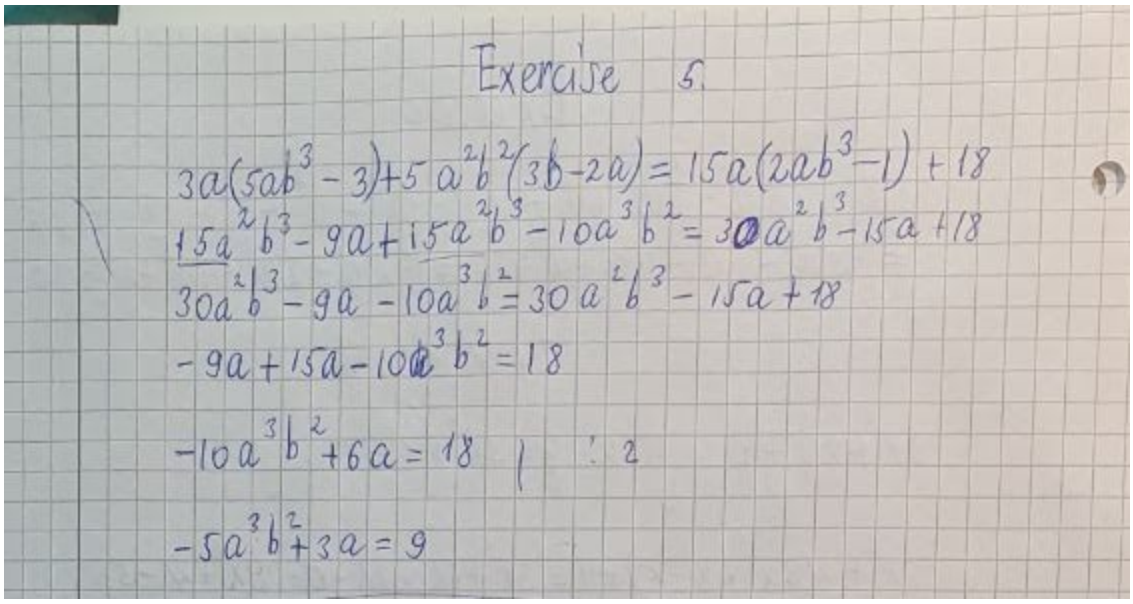
Exercise 3



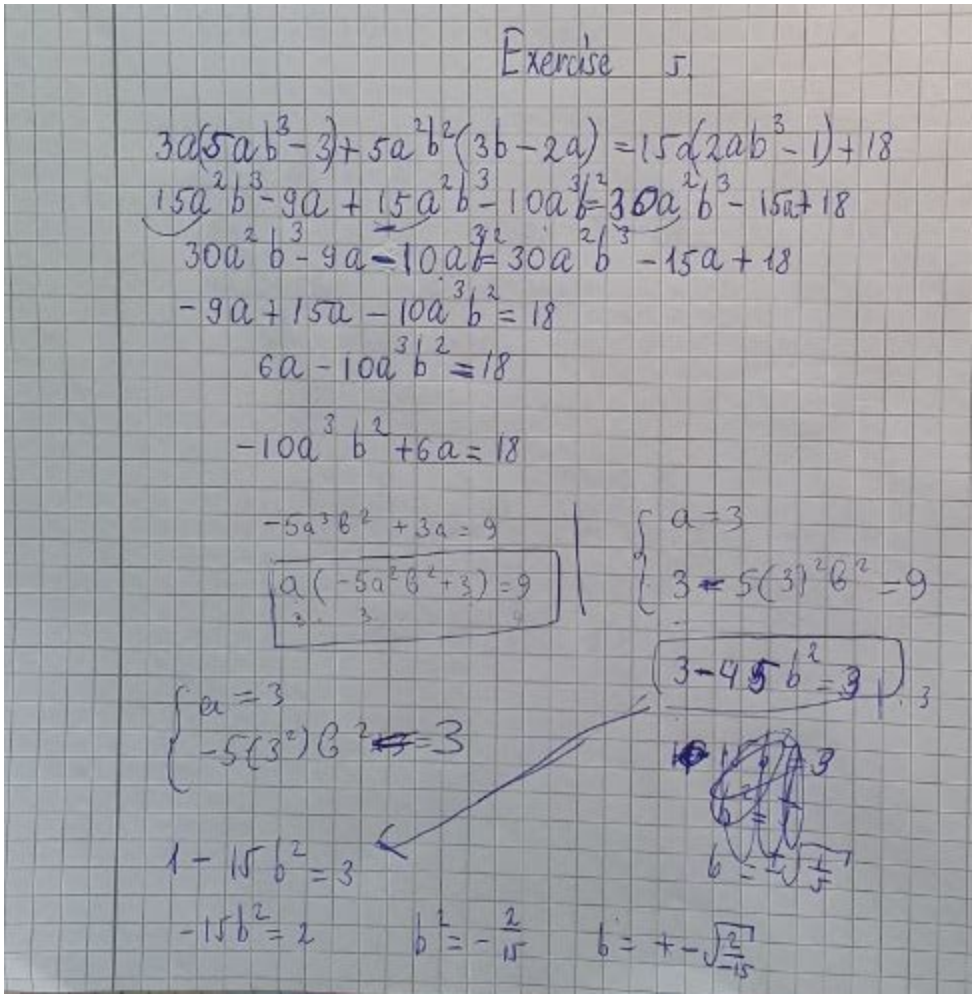
Exercise 4

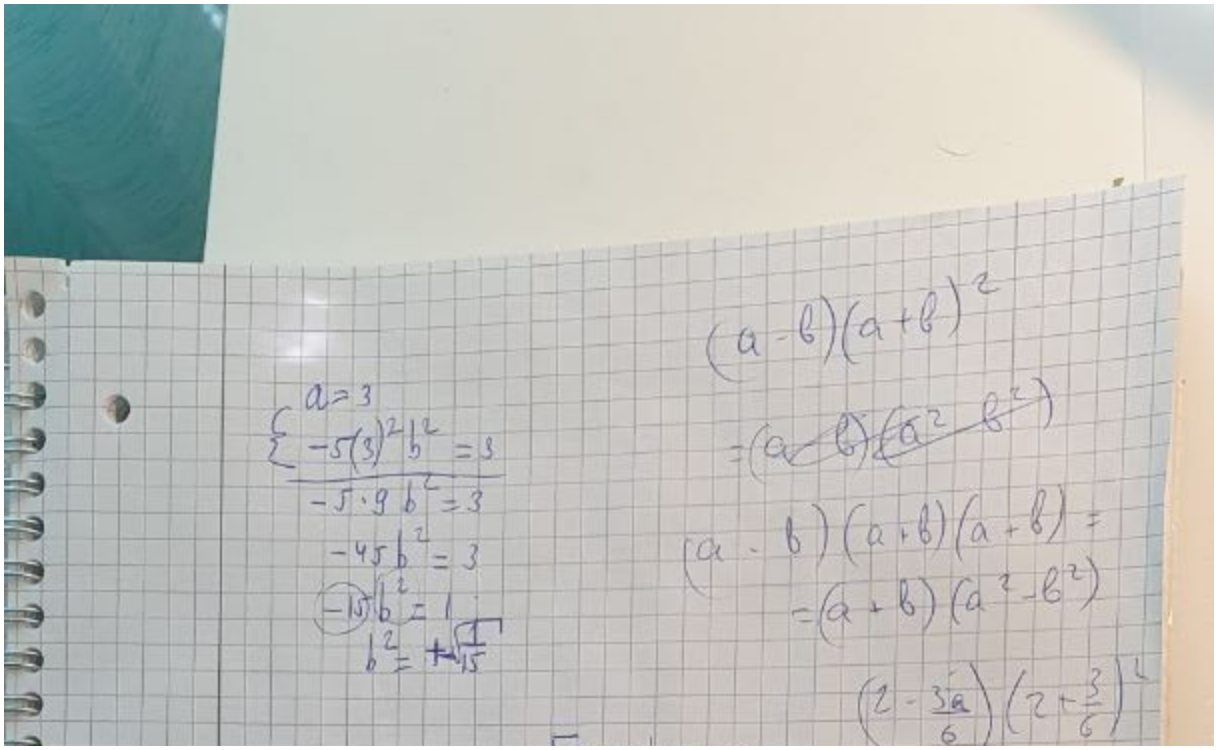

Exercise 4
$p_1(b) = 12b^4 - 10b^2 + 7$
$p_2(b) = 1,4b^3 - 5b^4 + b + 1,2$
a) $p(b) = 2(12b^4 - 10b^2 + 7) + 1,4b^3 - 5b^4 + b + 1,2$
$p(b) = 24b^4 - 20b^2 + 14 + 1,4b^3 - 5b^4 + b + 1,2$
$p(b) = 19b^4 + 1,4b^3 - 20b^2 + b + 15,2$
b) $p(b) = 12b^4 - 10b^2 + 7 - 3(1,4b^3 - 5b^4 + b + 1,2)$
$p(b) = 12b^4 - 10b^2 + 7 - 4,2b^3 + 15b^4 - 3b - 3,6$
$p(b) = 27b^4 - 4,2b^3 - 10b^2 - 3b + 4,6$

Exercise 5

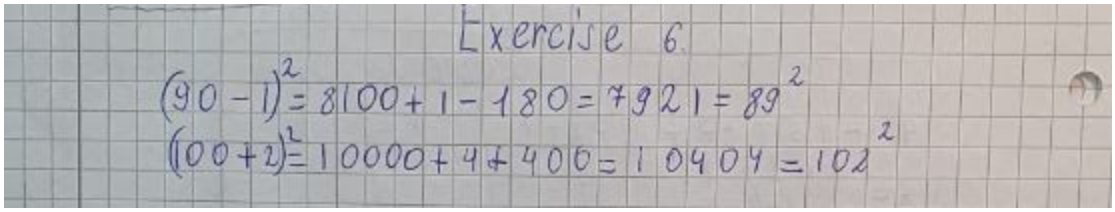

Exercise 5
$3a(5ab^3 - 3) + 5a^2b^2(3b - 2a) = 15a(2ab^3 - 1) + 18$
$15a^2b^3 - 9a + 15a^2b^3 - 10a^3b^2 = 30a^2b^3 - 15a + 18$
$30a^2b^3 - 9a - 10a^3b^2 = 30a^2b^3 - 15a + 18$
$-9a + 15a - 10a^3b^2 = 18$
$-10a^3b^2 + 6a = 18 \mid : 2$
$-5a^3b^2 + 3a = 9$

I did not get the solution but I tried

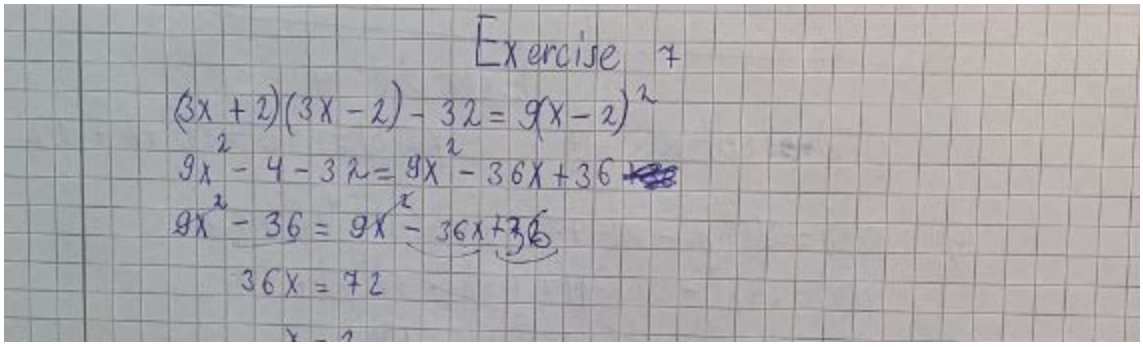




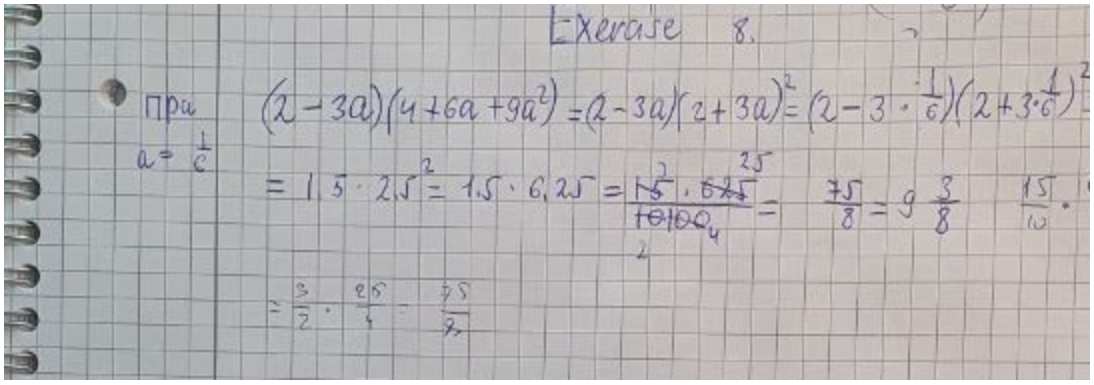
Exercise 6



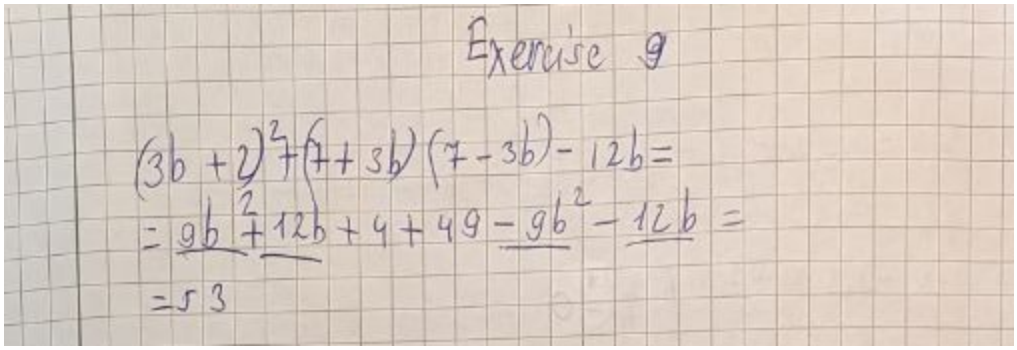
Exercise 7



Exercise 8


Exercise 8.
при $a = \frac{1}{6}$
$(2-3a)(4+6a+9a^2) = (2-3a)(2+3a)^2 = (2-3\cdot\frac{1}{6})(2+3\cdot\frac{1}{6})^2$
$= 1,5 \cdot 2,5^2 = 1,5 \cdot 6,25 = \frac{15 \cdot 625}{1000} = \frac{75}{8} = 9\frac{3}{8}$
$\frac{15}{10}$
$= \frac{3}{2} \cdot \frac{25}{4} = \frac{75}{8}$

Exercise 9


Exercise 9
$(3b+2)^2 + (7+3b)(7-3b) - 12b =$
$= 9b^2 + 12b + 4 + 49 - 9b^2 - 12b =$
$= 53$