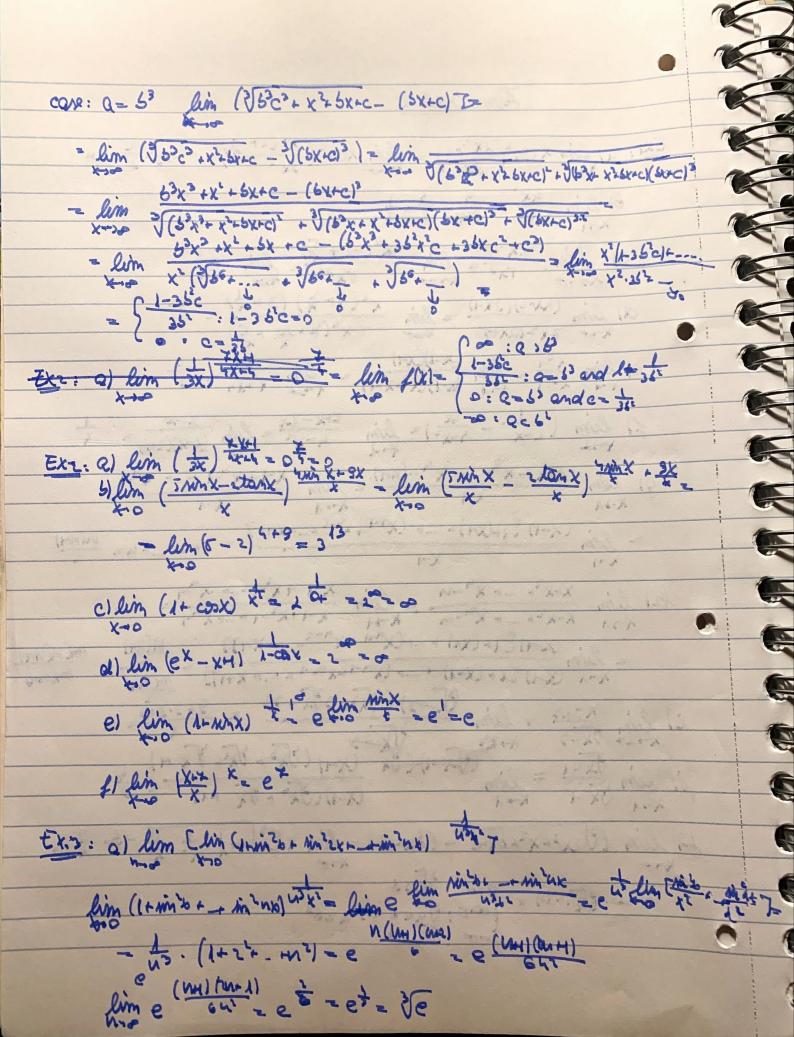
Romework 6

EX1: a) lim x con (2x2+2) = lim xco (x2 (2+ 2) = cos? == == b) lim 4x = 4 = 1 = 1 = 1 = 1 C) lim 2x245 lim x (-2+ x) lim 5x d) lim (4x+2)(3x4) = lim x2(4+3)(3+2) - 12 x-2 xx2+10x+5 + 200 x2(2+10) + 12 e) lim x2-1 - lim (x=1)(x+1) = lim x2-1 = 3 1) lim (-x - 1x) = lim 2+x-2x = lim (2-x)(2+x) = 4 g) lim ++x+x2+-+x4-(NH) = lim x-1+x-1+-+x21 = lim (X-1) [1+(XH)+ -+ (XM-1+XM)] = 1+2+ -+ N= N(NH) h) $\lim_{X \to \lambda} \frac{X + X^{2} + ... + X^{m} - m}{X - x^{m} + x^{m} - m} = \lim_{X \to \lambda} \frac{X - 1 + X^{2} - 1 + ... + X^{m} - 1}{X - 1 + x^{m} - 1 + x^{m} - 1 + x^{m} - 1} = \lim_{X \to \lambda} \frac{(X - 1) \left(1 + (X + 1) + ... + (X + 1) + x^{m} - 1 + x^{m} - 1 + x^{m} +$ -0. ([-5] - [000; Vass and ess



b) lim (lim (4+ ln (1+x)+ -+ ln (1+ax)) 1 1 7= lim Let la (14x1+ la (1+2x1+-+ la (1+ ux)) who to e in him (la ((+x) - - - la (++ nx)) = lim - fly la (1+ let). let = k = = e mi (1+2m+41) = e million) = e mi lim e the et eve Exs: a) lim ex-1 C'4 lim = }