of Quadratic Derivation formulae To derive: x=-b±162-4ac ax2+bx+c=0 (general form of quadratic equation) 4a(ax2+bx+c) = 4a(o) [multiply both sides 50 × - 50 L = 64 40] 40222 + 4abx 44ca= 0 Transfer 9 ac from LHS to RHS 402x2 + 401x = -400 - 40c (2ax) + 2x2axxxb = - Yac Now add 62-62 in 12HS (20x)2 + 2 X 20x X P + P2-P3 = - Lac Transfer -62 from LHS to RHS (20x) + 2x 20x xb + 62 = 62-4ac on comparing LHS with a2 + 2ab + 62 (20x) + 2x 20xx xb + b2 = (20x+b)2

(2ax+b)2 = .62-4ac Now square root both sides 1(2ax + 6)2 = + 162-4ac 2H9 of 2HJ MOGE DON LHS to RHS 201- 201 = xtol + 5x50f (2000) + 2x20xxxx = - 10c 2HL nie -J--J bbo woll 2017-=51-51+ JX 205XS + 5(205) 244 of 241 MOST 3- 8072NDST 201-57 = 27 + 9 x x022 x2 + 2 (x02) SHIDST-SO HIW 241 BUILDED MOD NO S(d+xcos) = 51+ dx xxxxxxxxx + 5(xxx)