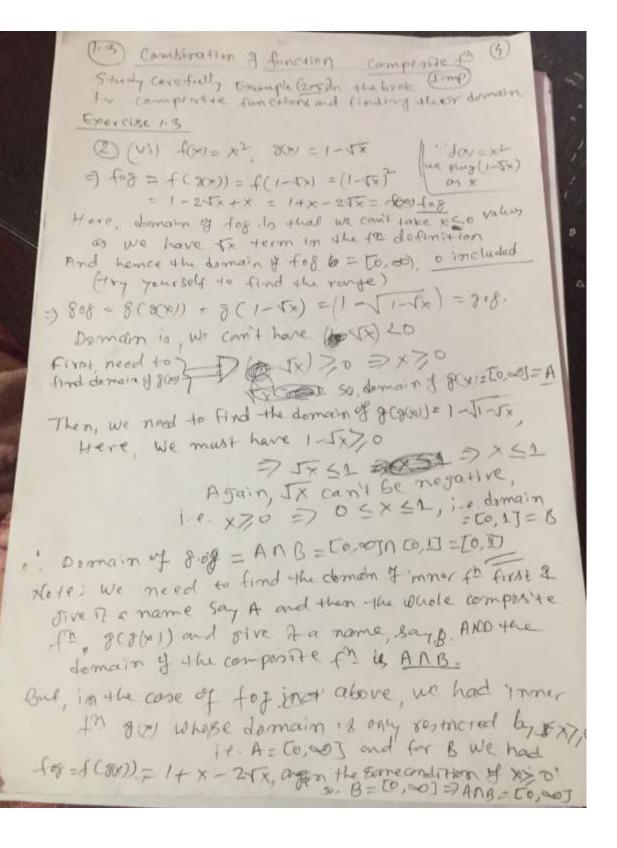
Impresent questions to be taken coll to Study corefully (former domain 5 tendy corefully Exampl Latt the book Find domain and range of ! in) カーゴエー、iv) オニケメ D y=x2 11) y= + See all the Kolutions in book Here are some more from exercise: 3) Find domain and rounge of For domain , all the valid values of x, that i) h(x) = (4-x2 when plugged into hos Tust & hould give > (4-x2) >0 (root of -ve number is not changing 813n, we get real number Nx) = y = (squaring both sides) y = 4- x2 = 4-y2 =) x = +(4-y2, Again, for all values 9 (4-85) 70, we get corresponding real 7 y = y ≤ 0 => (y + 2)(y - 2) ≤ 0 => -2< y ≥ 2 But in our question, The only prosible neither) values of of given x et-2,2] is positive western) number because square root of -ve rand

Siven 3(x) = 2x + 3, the valid do main In this case in x-3 to, this is to avoid division => x +3 not included zero ixeuel So, domain = (-00, 5) (73,00) For range, let's inverse the function: 500= 3 = 2×17 => xy-3y = 2×17 D xy-2x=30+1 × (y-2) = 38+1 => 4-2 =0 The possible value of y = (-00,2) U(2;00) Now, checking back to the question, there is no restriction imposed by the question for the range 1 => range - (-00,2) U(2,0) (Letts dee, if we pay if in also in the rouge, then, we can pay that y=2 = 2 = 2x+1 (Hence, 2 should be excluded from the ronge) make sense) =) See the Vertical Line test to check for a function solve the examples from Look. like x2xy2=9 =) A 18: study carefully the examples in the book about Even and odd function: Symmetry one more example from exercise: 5) (1V) Check for odd or even tunction =) f(-x)=21-x1+1=21x1+1=f(x)=) evenfy b) f(x) = 3 =) 8 (x) = 3 = 8 (x) =) even d2 111) h(x) = 1+x3-x5=) h(x)=1+(-x3--tx5) Neither odd nor even Hake -1 common = -1(x3-1-x5) to to

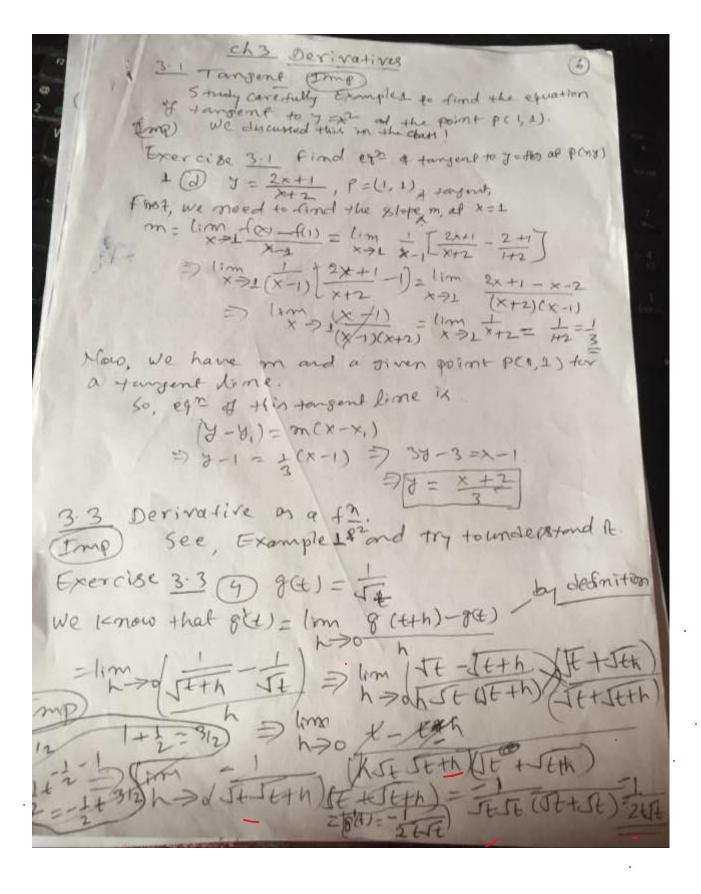
Study carefully, example 8 of the book Scriff-x if x 5-1 7 we discussed this in deadl x2 3x7-1) In the class ! Brock Clase 1.1 (1) Evaluation Just put 3 + h ked 4-3(3+h)-(4-3xD= 4-1-3K-4+5-3 1.2 Cinear markemetical model standy carefully the example I in the book (we also discussed this in the class). (100,2200) one point in

100 chair cost \$ 42200

Also orver in 300 chair cost \$ 4800 => 1300, 4800). Here the x variable is Mumber of chairs and y is the cost. So, we on build a linear model in the form of y=mx+6 with other two data points given We remove, m = 71-71 - 4800 - 2210 250= 13 So, we can take any me point and this slope to make a linear model. find the interest of 5! 2200 = 13 ×100 +6 =) 6 = 2200 - 1300 2900 5, our find model of y = 13 p + 900 =) 91 we want to build one more char, the cost would 50 up by \$13, \$= 13 The value of 5 indicates even of we don't probe a north chair (x=0), we incar the cost (fixed by



Continuing with previous question 8 = 8 (don) = 8 (x2) = 1-1x2=1-x in this case domain of 8 of 5) An B Immer (-ao, ao) B = doman of g = 1- x = (-00,00) = PARB = (-00,00) you can try for for, yoursels/1 ch 2 Limit 1) Find the limit: lim J2x2+1, if we directly apply or 3x-5, the limit x 30 in ord for, then we get so minder So, to solve this type of problem, we need to bring the variable in the form of E, c is a count We can manipulate the fit as Lim x > 1 8x2 + 1/2, multiplying both 3x - 5 denominator & numerous $= \int \frac{1}{3-6} \int \frac{1}{3-5/x} \int \frac{1}{3-6} \int \frac{1}{3-6}$ 1) lim x = 2 x - 96, here also, we can't apply x = 2 x - 4, limit directly on we get o De coll review limit & continuity in class rept was



Since the root for is defined only for non-negative ? value and the rectional for is defined only for mon-zero denominator value, both ge, and 5(4) are desired for only & 6(000) (Important point trok) Try to solve other problems in this exercise yourself 1 Remember all the rules and do fivatives of 3.4 Review & derivative trigonometric & transental (1984) forcions Apply those rules and solve for the derivatives of any order for the Fiven problem Exercise 3.4 (8) differentiate (1) -(x) = 3x2-208x =) = d (3x1 - 2(05x) = (3x3) d (3x3) d (2(05x)) = 6x + 25inx (3) 3(0) = 20 (tant-0). 20 = 20 d (+ano-0) + (+ano-0) d(e20) = e² (sec²0 - 1) + (4000 - 0) de²0 d(20) = e²0 (sec²0 - 1) + (4000 - 0) 20.2 = e²0 (sec²0 - 1) + (4000 - 0) 20.2 = e²0 (sec²0 - 1) + (4000 - 0) 20.2 = e = { Sec 0-1) + 2(tano-0)}

Try bolving all problems of the exerci