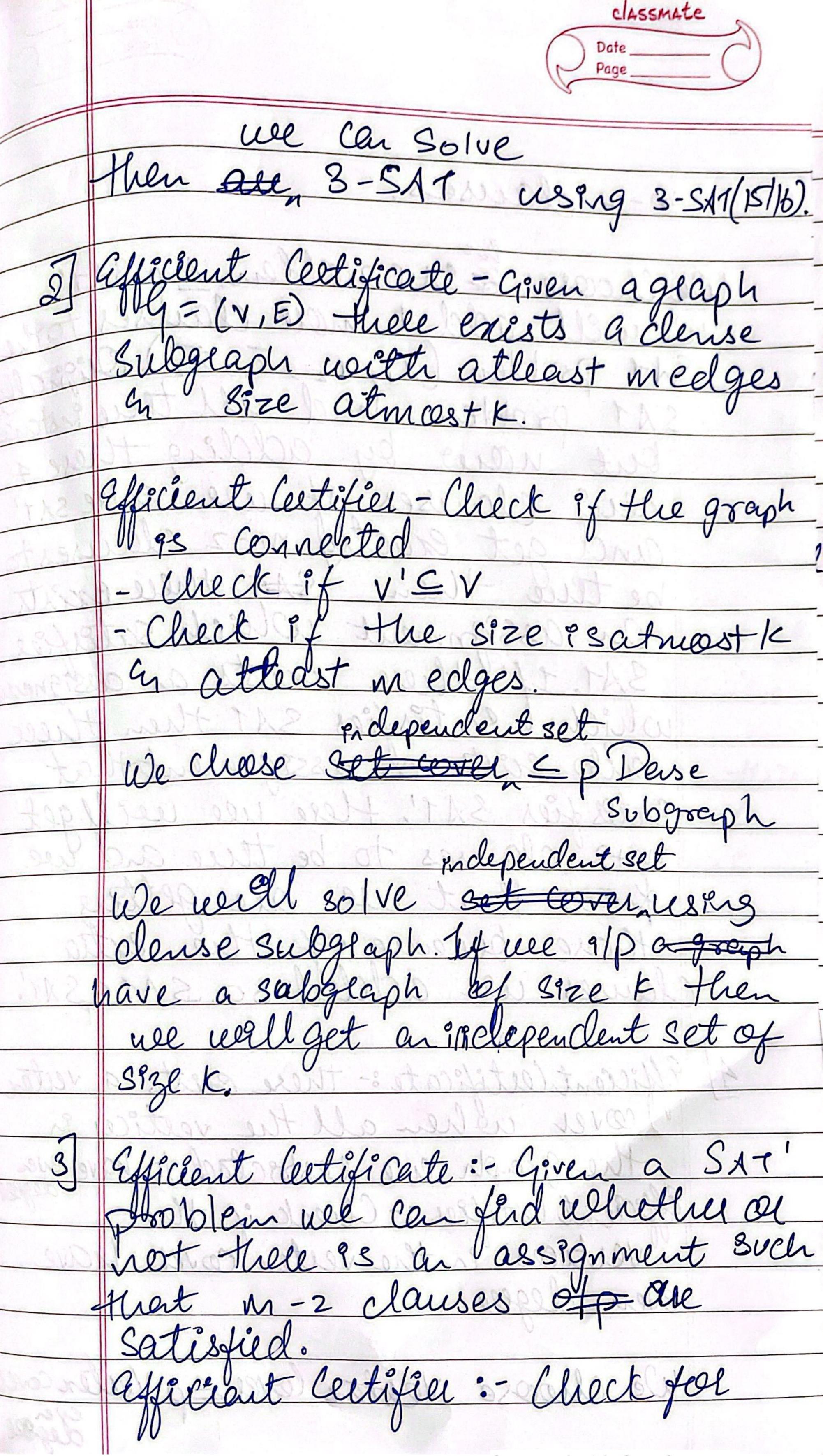
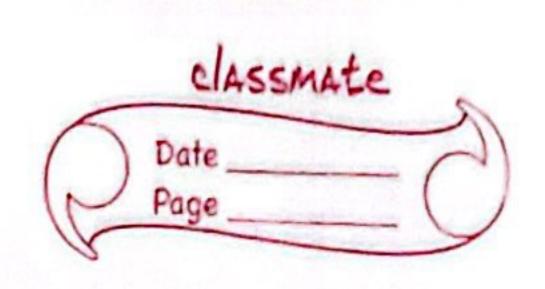
Haneweek 10 Efficient Celtificate: - Cover a 3-Sati with atleast ar clauses Efficient Certifier :- Check if every clay
Whas 3 laterals - Check of there are atleast of Clauses wellach are teme We chose 3-SAT = p 3-SAT (15/16) We know that in 35A1 all the clauses are three 30 in Older to Convert 3- SAI #5, 3-SAI (15/16 uee well add the 8 possible clauses given en the hent, which ensure that the total rece 16.



classmate m-2 clauses We Choose & SAT problem & p SAT We well add 4 move clauses to the Porblen (x, x, x, x, x). Oligerally 1 problen had all terre enstance by adding these & renj clauses et une solve sit and get exactly m-2 clauses to be true then 347 there exists an assignment which satisfies SAI If there exists an assignmen which I satisfies 311 then there allo exists an assignment that Satte fies 311. Here we well get m+2 clauses to be the and we krow flat we are getterg those because of the extra clauses use added so. SA1 = SA1! 4) Efficient Certificate: - there crists a verter cover when all the vertices in the graph are restricted to have ever efficient Certifier: - Check if the vertices on the vertex cover have We choose Vester Cover & Verter Cover & Verter Cover & Legal

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Gren a geaph with a mostelle of even a odd deglel. An edge in t graph contribites to a 2 deglel. So there yell be even no of vertices weeth odd degele. odd doglee vertices. We add 2 mole vertices En connect then to the additional vode. his will ensur that the filst new vocle that we added was't affect the actual vertex cover ensuels. Nous ule run Veltencover On Kris Gy if wel get a veeter cover of Size ++2 then we say that verten cover se NP complete even when all vertices in the graph have even deglee.