

Jude-Shima Favour

17FE021039

COMPUTER ENGINEERING

Math Assignment III

QUESTION

\* If  $\phi = x^2y^2z^3 + xy^2z^2$ , write a MATLAB m file program to determine grad  $\phi$  at the p.o.  $P(1, 3, 2)$

SOLN

\* Command window

\* clear

\* clc

\* syms x

\* syms y

\* syms z

\*  $s = x^2 * y^2 * z^3 + x * y^2 * z^2$

\*  $g = \text{gradient}(s, [x, y, z])$

\*  $\text{subs}(g, [x, y, z], [1, 3, 2])$ .