	Data
100 × 3.	TO TAY
Hormula.	obbe 1 Sherman Morrison
Jormula.	ATOFI
1 A 2 V 1 1 - A A 2 V. V 1 -	WUNFAA
We can prove by Consider	ing LHS=X&RHS=Y
50 0X 7/2 0X A + TO // A)	- 1 12 L1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
il & only a X Y = Y?	X S I,
ib & only a jo xxx = Yx	TWING
Starting with XY= I.	1
XX = A+ UNOT)	ATTAINOTA:
135 1 To 1 + 10	1+ VAU
- AATTUSTATIONATU	INTATI FILLY A UN A
	14 0' A U
$= I + uv^T A^{-1} - uv^T$	TA-1+ UVTA-1 W WT A-1
I = XY = YX bavious	17 WTA-14
- T + UVTA-1 - 4 61 +	Ta-1 2 Ta-1
= T + UVA - u E1 +  = T + uvTA - uvT	1+0-A-14
= I + uvI A-1 - uvI	A-1 /

0. 0

Yor YX = I

2 (A-1- A-1 UVTA-1) (A+ UVT)

1+OTA-14

= A-'A + A-'uvt - A-' uvt A-'A - A-' uvt A-'uvt 1+ UTA-1 U

= A-1A+A-1uvT - (A-uvT+A-uvTA-1uvT)

L'ATO FE = I + A "uv" - A"u (vT+vTA"uvT)

2-4 XUTA-14

- IT + AT'UVTA- ATUCCATHOTATUS OT

1+ CUT A-ILL

THATUNT ATHUNT TRUET AN

LE THURSTAND - TATED + I

Thus we have prooved XY= YX=I

Hence yours inverse of X

X-1= (A+UVT) = Y = (A-1A-1 UVTA-1 W-ATON