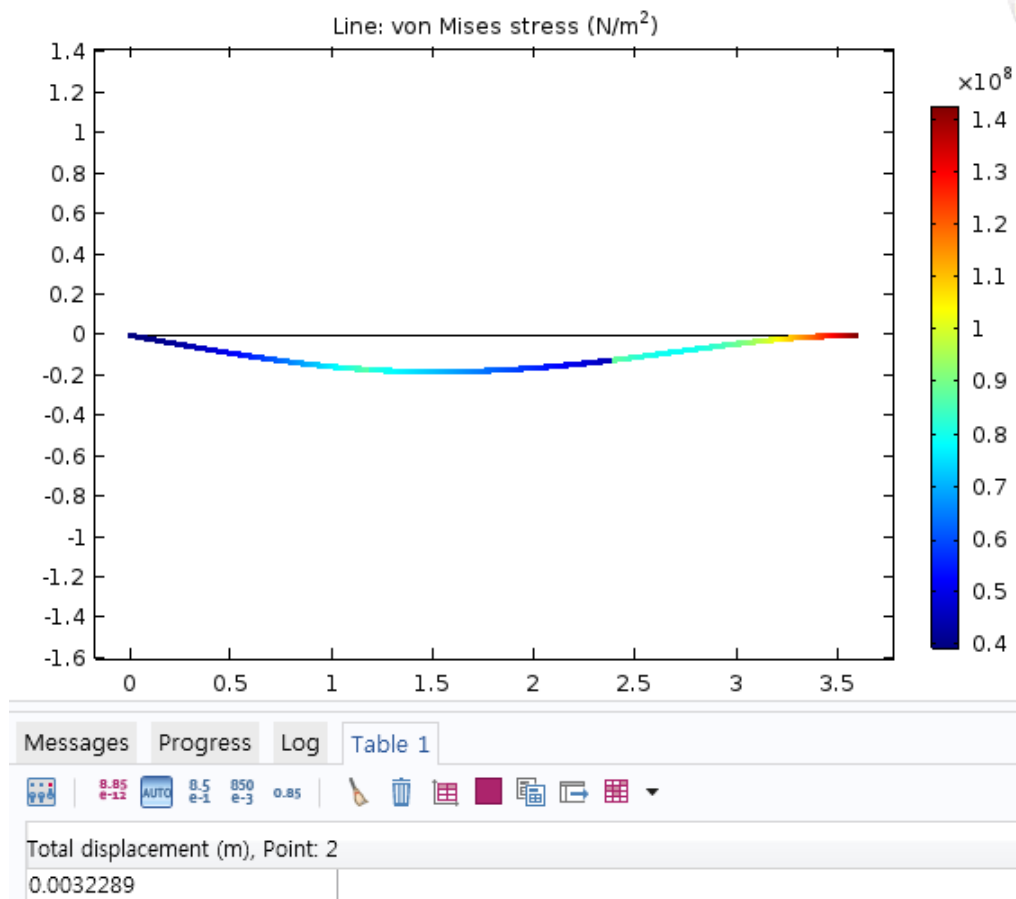
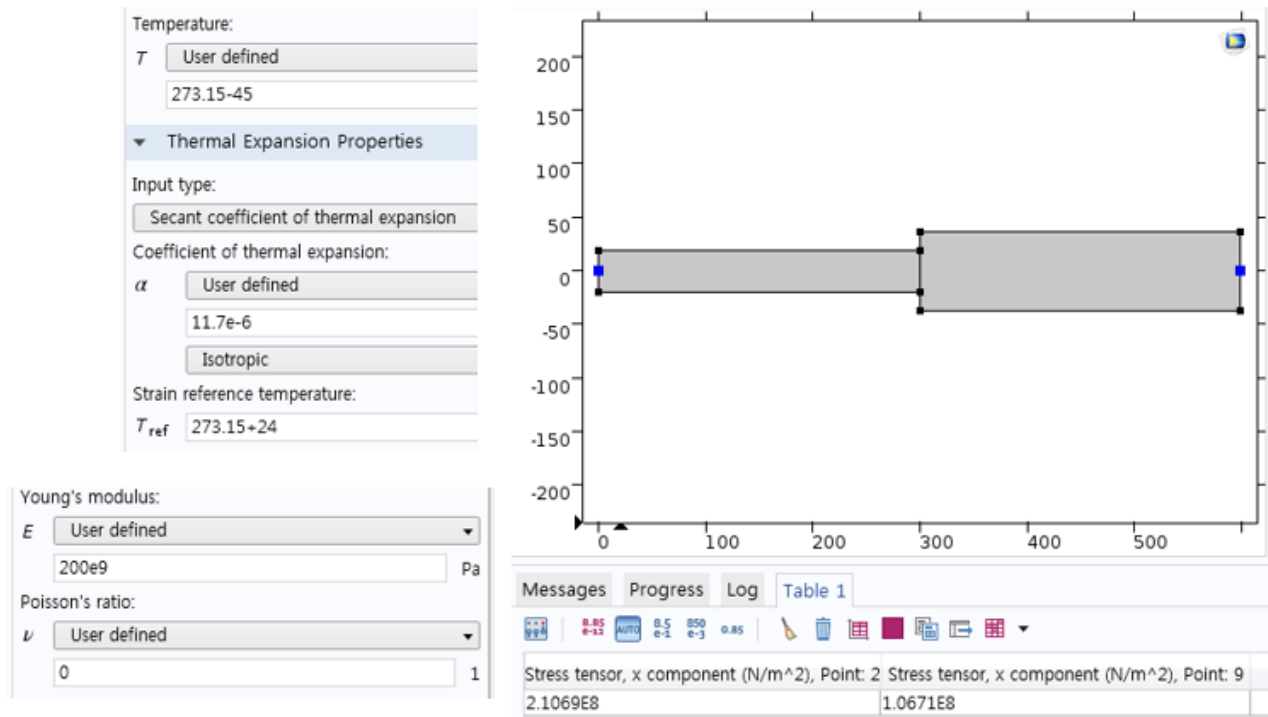


pb1	1) geometry(1), material(1), cross section(2), boundary condition(2), mesh(2), point evaluation(2)
	2) assemble(2), K&f 결과(2), $K \backslash f = u$ 계산(2)
pb2	1) geometry&material(1), thermal expansion(2), cross section(1), boundary condition(1), point evaluation(1)
	2) geometry(2), material(1), thermal expansion(2), boundary condition(3), point evaluation(2)
pb3	geometry(1), material(1), boundary condition(3), mesh(2), cut line(3), line plot graph(4), table(4)
pb4	1) geometry(3), material(1), boundary condition(3), mesh(mapped(4), quad(2)), point evaluation(2)
	2) $R=0.2 \sim 0.5$ 별 maximum stress(2), average stress(2), $K_{\text{값}}$ (4)
pb5	1) geometry(4), material(2), current(2), cut line(2), line plot graph(2), force calculation(left(3), right(3), total(2))
	2) mesh(mapped(4), quad(1)), force calculation(2)
timeover	제출시간 2분 초과 시 마다 -1점(6:05분 종료)
Etc.	문제 별 결과 ppt 미 첨부 시 감점

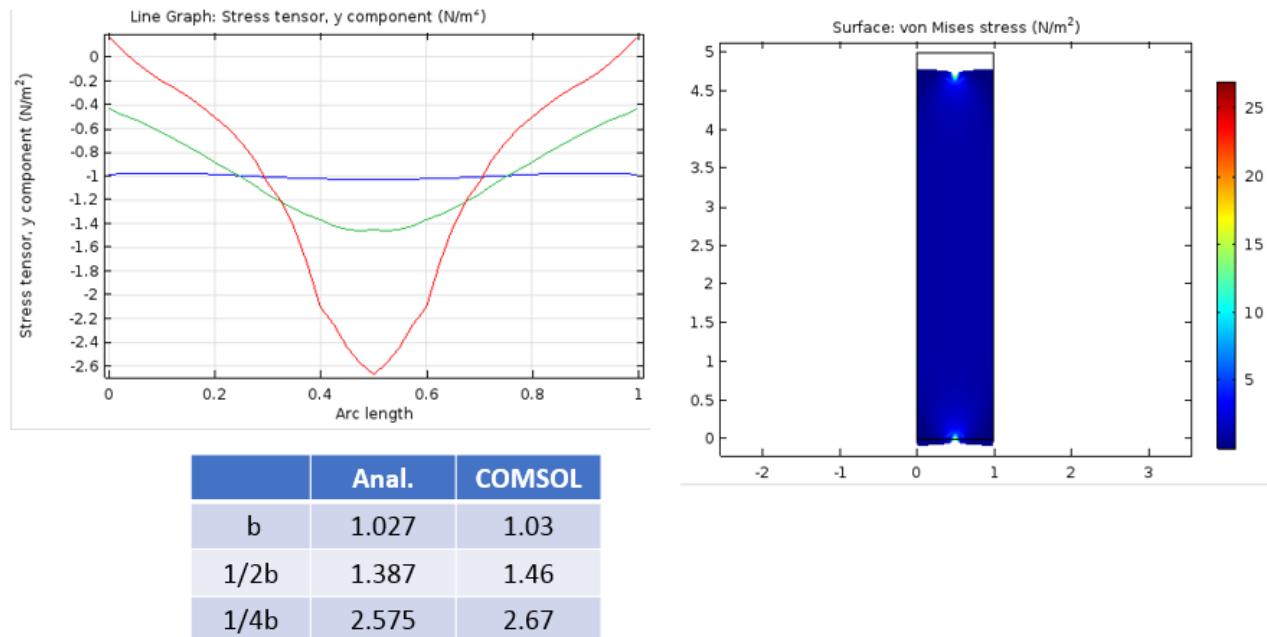
1.



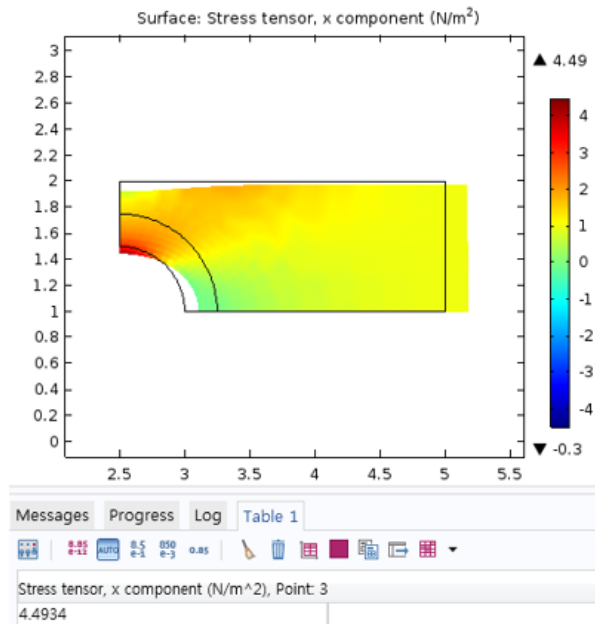
2.



3.



4.



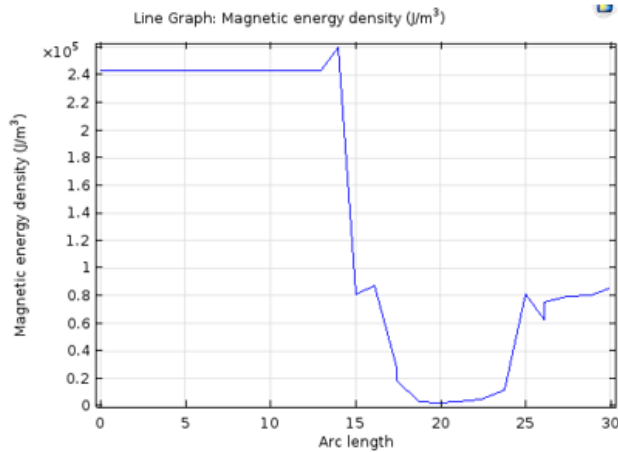
r [m]	0.5	0.4	0.3	0.2
Anal.	2.18	2.30	2.46	2.62
COMSOL	2.24	2.37	2.51	2.62

계산과정

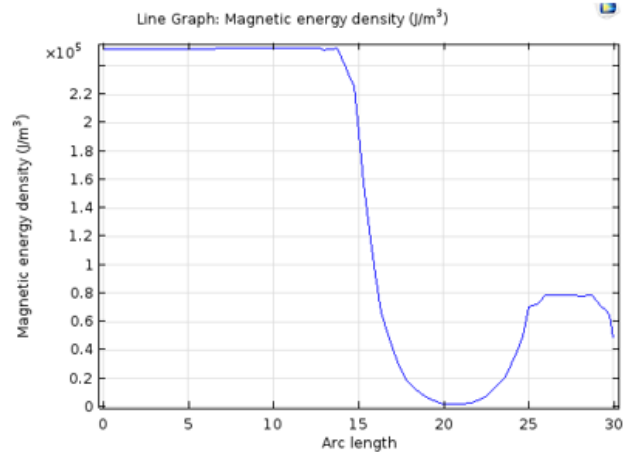
r	0.5	0.4	0.3	0.2
sig_ave	2	1.6667	1.42857	1.25
sig_max	4.49	3.95	3.59	3.28
K	2.18	2.3	2.46	2.62
	2.245	2.369953	2.513003	2.624

5.

Triangular



Mapped + Quad



W_left	2.40E+05 J/m ³
W_right	8.00E+04 J/m ³
Ra	0.015 m
Rb	0.03 m
Rc	0.025 m
g	0.002 m
V_left	1.41372E-06 m ³
V_right	1.72788E-06 m ³
F_left	1.70E+02 N
F_right	6.91E+01 N
Ftotal	2.39E+02 N