P1=	4.00E+05	Pa			
V critical=	3	m/s			
z3=	0.3	m			
gamma=	9.81E-03	N/m3	L1=	6.5	m
nu=	1.52E-06	m2/s	L2=	0.3	m
e=	4.60E-05	m	L3=	8.3	m
g=	9.81E+03	N/m2			
D1=	0.0409	m	A1=	1.31E-03	m2
D2=	0.0266	m	A2=	5.57E-04	m2
D3=	0.0266	m	A3=	5.57E-04	m2
Kteev2=	60				
Kelbow=	20				
Kballvalve=	150				
Ksud con=	0.25				
Ksprinkler=	50				
kteev2=	20				

	Assume				
Iteration	Q1 (m3/s)	Re1	(D/e)1	f1	fT1
1	0.01	204,806.26	889.13	0.02	0.02
	0.01	204,806.26	889.13	0.02	0.02
	0.01	204,806.26	889.13	0.02	0.02
	0.01	204,806.26	889.13	0.02	0.02

V1=	V2=	V3=
3.43E+03	6.02E+03	2.06E+03

V1= 3.43E+03
V2= 6.02E+03
V3= 2.06E+03

problem 1

	Assume						
NUM	f3	(D/e)3	fT3	DEN3	Q3 (m3/s)	Re3	f3new
40,774,719.36	0.01	578.26	0.02	5.70	1.49	46,954,857.30	0.02
40,774,719.36	0.02	578.26	0.02	9.61	1.15	36,148,887.41	0.02
40,774,719.36	0.02	578.26	0.02	9.61	1.15	36,147,488.50	0.02
40,774,719.36	0.02	578.26	0.02	9.61	1.15	36,147,488.27	0.02

V critival	%diffv1	%diffv2	%diffv3
3	-99.91%	-100.02%	-100.05%

	Assume							
%diff3	f2	(D/e)2	fT2	DEN2	Q2 (m3/s)	Re2	f2new	%diff2
1.25	0.01	578.26	0.02	1.12	3.36	105,719,254.58	0.02	1.25
0.00	0.02	578.26	0.02	1.12	3.36	105,719,254.58	0.02	0.00
0.00	0.02	578.26	0.02	1.12	3.36	105,719,254.58	0.02	0.00
0.00	0.02	578.26	0.02	1.12	3.36	105,719,254.58	0.02	0.00

Q1 (m3/s)
4.85
4.51
4.51
4.51