Alpha = 0.05 Our values

Obs	power	n	mean
1	0.45309	10	20
2	0.61078	15	20
3	0.65669	20	20
4	0.94411	50	20
5	1.00000	100	20
6	0.87226	10	40
7	0.96806	15	40
8	0.99202	20	40
9	1.00000	50	40
10	1.00000	100	40
11	0.99800	10	60
12	1.00000	15	60
13	1.00000	20	60
14	1.00000	50	60
15	1.00000	100	60
16	1.00000	10	80
17	1.00000	15	80
18	1.00000	20	80
19	1.00000	50	80
20	1.00000	100	80
21	1.00000	10	100
22	1.00000	15	100
23	1.00000	20	100
24	1.00000	50	100
25	1.00000	100	100

Alpha = 0.05 Power procedure values

The POWER Procedure One-Sample t Test for Mean

Fixed Scenario Elements		
Normal		
Exact		
1		
0.05		
42		
0		

Computed Power			
Index	Mean	N Total	Power
1	20	10	0.400
2	20	15	0.544
3	20	20	0.658
4	20	50	0.953
5	20	100	0.999
6	40	10	0.871
7	40	15	0.968
8	40	20	0.993
9	40	50	>.999
10	40	100	>.999
11	60	10	0.994
12	60	15	>.999
13	60	20	>.999
14	60	50	>.999
15	60	100	>.999
16	80	10	>.999
17	80	15	>.999
18	80	20	>.999
19	80	50	>.999
20	80	100	>.999
21	100	10	>.999
22	100	15	>.999
23	100	20	>.999
24	100	50	>.999
25	100	100	>.999

Alpha = 0.01 Our values

Obs	power	n	mean
1	0.17565	10	20
2	0.32335	15	20
3	0.36327	20	20
4	0.79641	50	20
5	0.99202	100	20
6	0.64671	10	40
7	0.85629	15	40
8	0.94411	20	40
9	1.00000	50	40
10	1.00000	100	40
11	0.94212	10	60
12	1.00000	15	60
13	1.00000	20	60
14	1.00000	50	60
15	1.00000	100	60
16	0.99601	10	80
17	1.00000	15	80
18	1.00000	20	80
19	1.00000	50	80
20	1.00000	100	80
21	1.00000	10	100
22	1.00000	15	100
23	1.00000	20	100
24	1.00000	50	100
25	1.00000	100	100

Alpha = 0.01 Power procedure values

The POWER Procedure One-Sample t Test for Mean

Fixed Scenario Elements		
Distribution	Normal	
Method	Exact	
Number of Sides	1	
Alpha	0.01	
Standard Deviation	42	
Null Mean	0	

Computed Power			
Index	Mean	N Total	Power
1	20	10	0.150
2	20	15	0.256
3	20	20	0.364
4	20	50	0.828
5	20	100	0.991
6	40	10	0.591
7	40	15	0.841
8	40	20	0.947
9	40	50	>.999
10	40	100	>.999
11	60	10	0.930
12	60	15	0.996
13	60	20	>.999
14	60	50	>.999
15	60	100	>.999
16	80	10	0.997
17	80	15	>.999
18	80	20	>.999
19	80	50	>.999
20	80	100	>.999
21	100	10	>.999
22	100	15	>.999
23	100	20	>.999
24	100	50	>.999
25	100	100	>.999