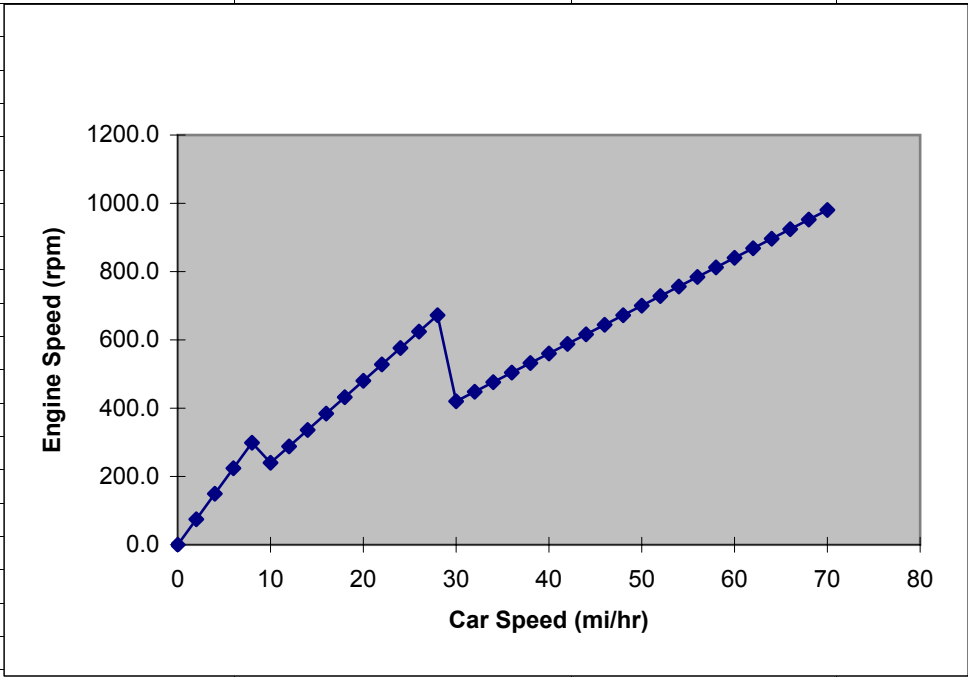


	A	B	C	D
1	TRANSMISSION GEAR RATIO ANALYSIS			
2				
3				
4	Gear Pitch (teeth/in):		Shaft Centerline Distance (in):	
5	10		5	
6		Tire Radius (in):		
7		12		
8				
9				
10	Number of Teeth in Input Shaft Gears (teeth):			
11	<i>N1</i>	<i>N4</i>	<i>N6</i>	
12	20	40	30	
13	Gear Diameters (in):			
14	2	4	3	
15				
16				
17	Number of Teeth in Output Shaft Gears (teeth):			
18	<i>N2</i>	<i>N3</i>	<i>N5</i>	
19	80	60	70	
20	Gear Diameters (in):			
21	8	6	7	
22				
23				
24	Transmission Gear Ratios:			
25	<i>first</i>	<i>second</i>	<i>third</i>	
26	0.38	0.58	1.00	
27				
28	Car Speeds at Gear Shifts (mi/hr):			
29	<i>first-to-second</i>	<i>second-to-third</i>		
30	10	30		
31				
32	Drive-shaft Speeds at Gear Shifts (rpm):			
33	<i>first-to-second</i>	<i>second-to-third</i>		
34	140.1	420.2		
35				
36				
37	Car Speed (mi/hr):	Drive-shaft Speed (rpm):	Engine Speed (rpm):	Gear
38	0	0.0	0.0	first
39	2	28.0	74.7	first
40	4	56.0	149.4	first
41	6	84.0	224.1	first
42	8	112.0	298.8	first
43	10	140.1	240.1	second
44	12	168.1	288.1	second
45	14	196.1	336.1	second
46	16	224.1	384.2	second
47	18	252.1	432.2	second

	A	B	C	D
56	36	504.2	504.2	third
57	38	532.2	532.2	third
58	40	560.2	560.2	third
59	42	588.2	588.2	third
60	44	616.2	616.2	third
61	46	644.3	644.3	third
62	48	672.3	672.3	third
63	50	700.3	700.3	third
64	52	728.3	728.3	third
65	54	756.3	756.3	third
66	56	784.3	784.3	third
67	58	812.3	812.3	third
68	60	840.3	840.3	third
69	62	868.3	868.3	third
70	64	896.4	896.4	third
71	66	924.4	924.4	third
72	68	952.4	952.4	third
73	70	980.4	980.4	third
74				
75		Maximum Engine Speed:	980.4	
76				
77				



98				
99				