Inference for Stan model: anon_model_2e9be2d3d470d471df2282447ef7249e. 2 chains, each with iter=1000; warmup=500; thin=1; post-warmup draws per chain=500, total post-warmup draws=1000.

	mean	se mean	sd	2.5%	25%	50%	75%	97.5%	n eff	Rhat
a[1]	6.84	0.33	2.75	1.37	4.86	6.82	8.69	12.26	71	1.03
a[2]	10.93	0.29	2.8	5.39	9.09	10.93	12.9	16.21	90	1.03
a[3] a[4]	8.51 -11.28	0.26 0.29	2.39	3.99 -17.06	6.85 -13.37	8.54 -11.3	10.19 -9.21	13.12 -4.78	82 107	1.03 1.01
a[5]	15.61	0.32	3.04	9.81	13.47	15.72	17.71	21.42	90	1.03
a[6]	-9.25	0.52		-17.76	-12.4	-9.21	-6.24	-0.36	76	1.02
a[7] a[8]	-0.03 -3.33	0.29 0.28	3.4 2.63	-7.1 -8.5	-2.15 -5.12	0.08 -3.22	2.05 -1.61	6.72 2.0	142 91	1.02 1.02
a[9]	-2.93	0.27	2.31	-7.35	-4.45	-2.92	-1.36	1.69	74	1.04
a[10]	-14.17	0.32 0.27	3.53 2.56	-21.45 -6.66	-16.53 -3.67	-14.01 -1.93	-11.71 -0.26	-7.5 2.98	118 93	1.02 1.03
a[11] a[12]	-1.94 -2.12	0.27	2.49	-7.0	-3.86	-1.93	-0.48	2.96	70	1.03
a[13]	2.5	0.3	2.42	-2.35	0.96	2.6	4.1	7.12	67	1.04
a[14] a[15]	0.65 -3.26	0.35 0.3	2.97 2.76	-5.26 -8.47	-1.36 -5.16	0.72 -3.29	2.57 -1.35	6.52 2.18	73 86	1.03 1.02
a[16]	36.86	0.34	2.85	31.42	34.92	36.97	38.69	42.17	71	1.03
a[17]	2.31	0.37	3.92	-5.26	-0.31	2.25	4.82	9.9	115	1.02
a[18] a[19]	16.68 -6.15	0.35 0.33	2.79 2.96	11.33 -12.03	14.84 -8.15	16.67 -6.05	18.52 -4.04	22.38 -0.7	63 79	1.04 1.03
a[20]	9.67	0.33	3.16	3.62	7.52	9.65	11.86	15.88	93	1.02
a[21] a[22]	-15.65 18.76	0.34 0.32	3.27 3.28	-22.08 12.37	-17.91 16.52	-15.51 18.82	-13.29 21.05	-9.73 25.05	95 102	1.01 1.04
a[22] a[23]	11.78	0.32	2.43	6.91	10.19	11.96	13.52	16.26	72	1.04
a[24]	1.16	0.35	3.35	-5.07	-1.27	1.2	3.5	7.87	89	1.03
a[25] a[26]	5.82 25.83	0.28 0.44	2.71 4.24	0.51 17.64	3.92 22.89	5.96 25.7	7.68 28.82	10.95 34.1	96 94	1.04 1.02
a[27]	27.92	0.3	2.74	22.86	26.01	27.85	29.9	33.29	82	1.02
a[28] a[29]	7.74 -23.35	0.35 0.44	3.04 3.83	1.65	5.7 -26.01	7.72	9.86	13.37 -15.92	75 77	1.03 1.02
a[29] a[30]	22.71	0.44	3.05	17.0	20.45	22.68	24.89	28.61	173	1.02
a[31]	7.5	0.25	2.54	2.35	5.87	7.52	9.15	12.29	100	1.02
a[32] a[33]	6.6 0.33	0.34 0.24	2.87	0.87 -4.95	4.64 -1.39	6.56 0.26	8.61 2.11	11.97 5.36	70 115	1.03 1.02
a[34]	11.62	0.4	4.05	3.54	9.01	11.69	14.49	19.17	101	1.01
a[35]	-9.35	0.31 0.32	3.73 2.56	-16.69 -4.85	-11.78 -1.3	-9.44	-6.78 2.06	-2.25 5.63	149 64	1.01 1.03
a[36] a[37]	0.38 20.22	0.32	2.83	14.7	18.27	0.45 20.27	22.13	25.75	61	1.03
b[1]	-0.42	3.2e-3	0.05	-0.53	-0.46	-0.43	-0.39	-0.32	276	1.02
b[2] mu a	0.73 0.78	9.9e-3 0.05	0.08	0.56 -1.17	0.67 0.09	0.73 0.78	0.78 1.54	0.88 2.59	68 356	1.02 1.0
sigma_a	14.1	0.1	1.94	10.94	12.82	13.89	15.17	18.98	363	1.02
sigma_y y_hat[1]	6.71 21.54	7.7e-3 0.05	0.21 1.64	6.33 18.24	6.57 20.41	6.71 21.55	6.84 22.71	7.11 24.79	717 1054	1.0
y_nat[1] y_hat[2]	21.34	0.05	1.63	18.09	20.41	21.33	22.52	24.79	1170	1.0
y_hat[3]	16.38	0.05	1.56	13.37	15.25	16.39	17.41	19.4	822	1.0
y_hat[4] y_hat[5]	17.7 17.8	0.04	1.54 1.53	14.78 14.89	16.59 16.67	17.71 17.84	18.74 18.84	20.59 20.69	1881 2047	1.0 1.0
y_hat[6]	17.73	0.03	1.53	14.84	16.61	17.76	18.78	20.62	2142	1.0
y_hat[7] y_hat[8]	17.43 17.18	0.03 0.03	1.52 1.52	14.52 14.28	16.33 16.09	17.45 17.2	18.46 18.2	20.29 20.02	2135 2179	1.0 1.0
y_nat[0] y_hat[9]	18.03	0.03	1.52	15.17	16.96	18.04	19.09	20.89	2228	1.0
y_hat[10]	17.64	0.03	1.52	14.75	16.56	17.64	18.68	20.49	2247	1.0
y_hat[11] y_hat[12]	16.09 16.95	0.03 0.03	1.52 1.52	13.25 14.04	15.04 15.91	16.12 16.97	17.12 18.0	18.94 19.8	2176 2188	1.0 1.0
y_hat[13]	16.05	0.03	1.52	13.17	15.02	16.08	17.08	18.9	2143	1.0
y_hat[14] y_hat[15]	15.43 14.96	0.04	1.54 1.57	12.57 11.97	14.39 13.89	15.46 14.99	16.47 16.02	18.35 17.92	1930 1590	1.0 1.0
y_hat[16]	14.27	0.04	1.58	11.24	13.19	14.3	15.33	17.23	1484	1.0
y_hat[17]	13.06	0.05	1.62	9.87	11.99	13.04	14.14	16.07	1247	1.0
y_hat[18] y_hat[19]	13.18 13.63	0.05 0.05	1.65 1.67	9.95 10.38	12.06 12.48	13.18 13.64	14.3 14.77	16.27 16.78	1084 974	1.0 1.0
y_hat[20]	17.75	0.05	1.78	14.26	16.61	17.74	18.93	21.25	1288	1.0
y_hat[21] y_hat[22]	17.26 19.08	0.05 0.04	1.78 1.77	13.77 15.66	16.14 17.97	17.25 19.07	18.43 20.24	20.73 22.52	1238 1796	1.0 1.0
y_hat[23]	21.33	0.05	1.81	17.74	20.21	21.3	22.51	24.78	1278	1.0

y_hat[24]	23.65	0.07	1.89	19.94	22.5	23.65	24.88	27.27	691	1.0
y_hat[25]	18.51	0.04	1.75	15.06	17.46	18.52	19.65	21.9	2244	1.0
y_hat[26]	17.73	0.03	1.74	14.36	16.7	17.72	18.84	21.09	2572	1.0
y_hat[27]	16.46	0.03	1.73	13.12	15.43	16.42	17.54	19.78	2937	1.0
y_hat[28]	15.92	0.03	1.73	12.57	14.89	15.9	17.0	19.18	2979	1.0
y_hat[29]	15.56	0.03	1.73	12.18	14.54	15.53	16.65	18.84	3014	1.0
y_hat[30]	15.87	0.03	1.73	12.49	14.84	15.85	16.97	19.15	3008	1.0
y_hat[31]	15.53	0.03	1.73	12.14	14.49	15.53	16.64	18.83	2975	1.0
y_hat[32]	15.32	0.03	1.73	11.95	14.29	15.32	16.42	18.66	2944	1.0
y_hat[33]	14.14	0.03	1.75	10.8	13.11	14.14	15.27	17.54	2627	1.0
y_hat[34]	13.96	0.04	1.75	10.61	12.92	13.96	15.1	17.4	2513	1.0
y_hat[35]	17.31	0.04	1.46	14.59	16.36	17.29	18.23	20.43	1387	1.0
y_hat[36]	17.08	0.04	1.45	14.39	16.12	17.05	17.98	20.15	1526	1.0
y_hat[37]	16.92	0.04	1.44	14.24	15.96	16.89	17.83	19.98	1538	1.0
y_hat[38]	16.36	0.04	1.43	13.69	15.41	16.35	17.24	19.38	1560	1.0
y_hat[39]	15.55	0.03	1.42	12.87	14.59	15.53	16.44	18.55	1657	1.0
y_hat[40]	15.76	0.04	1.42	13.08	14.8	15.75	16.66	18.76	1626	1.0
y_hat[41]	15.53	0.03	1.42	12.86	14.58	15.51	16.41	18.52	1757	1.0
y_hat[42]	14.97	0.03	1.4	12.27	14.05	14.97	15.83	17.98	2046	1.0
y_hat[43]	14.59	0.03	1.4	11.86	13.68	14.6	15.48	17.58	2094	1.0
y_hat[44]	14.29	0.03	1.4	11.53	13.38	14.3	15.18	17.25	2129	1.0
y_hat[45]	13.83	0.03	1.4	11.07	12.93	13.85	14.73	16.77	2017	1.0
y_hat[46]	13.39	0.03	1.41	10.6	12.49	13.41	14.29	16.31	1886	1.0
y_hat[47]	14.18	0.03	1.4	11.42	13.28	14.19	15.08	17.14	2108	1.0
y_hat[48]	14.71	0.03	1.4	11.91 13.27	13.78	14.69	15.58	17.65	2253 1812	1.0
y_hat[49]	16.08		1.41		15.13	16.06	17.01	19.04	-	1.0
y_hat[50]	15.14	0.03	1.4	12.33	14.21	15.13	16.06	18.12	2110	1.0
y_hat[51]	14.8	0.03	1.41	11.94	13.87	14.79	15.74	17.71	1938	1.0
y_hat[52]	15.04	0.03	1.42	12.15	14.1	15.02	16.0	17.93	1646	1.0
y_hat[53]	14.13	0.04	1.42	11.21	13.2	14.1	15.08	17.0	1625	1.0
y_hat[54]	12.88	0.04	1.43	9.99	11.95	12.87	13.84	15.78	1620	1.0
y_hat[55]	12.21	0.04	1.45	9.24	11.26	12.2	13.17	15.06	1434	1.0
y_hat[56]	11.46	0.04	1.48	8.35	10.47	11.48	12.42	14.28	1237	1.0
y_hat[57]	2.47	0.07	2.16	-1.69	1.02	2.41	3.9	6.9	952	1.0
lp	-1525	0.29	4.99	-1537	-1528	-1525	-1522	-1517	292	1.0

SUMMARY DATA FOR MODEL 2

Inference for Stan model: anon_model_2e9be2d3d470d471df2282447ef7249e. 2 chains, each with iter=1000; warmup=500; thin=1; post-warmup draws per chain=500, total post-warmup draws=1000.

	mean :	se mean	sd	2.5%	25%	50%	75%	97.5%	n eff	Rhat
a[1]	7.31	0.39	2.99	1.75	5.22	7.24	9.64	12.84	58	1.0
a[2]	11.37	0.35	2.94	5.24	9.35	11.48	13.46	16.71	70	1.0
a[3]	8.85	0.31	2.53	3.97	7.02	8.84	10.71	13.53	65	1.0
a[4]	-10.94	0.39		-17.89	-13.26	-10.82	-8.61	-4.74	75	1.0
a[5]	16.17	0.41	3.37	9.78	13.78	16.31	18.6	22.59	68	1.0
a[6]	-8.53	0.66		-18.69		-8.3	-4.75	1.04	60	1.0
a[7]	0.35	0.38	3.59	-6.53	-2.08	0.39	2.94	7.17	89	1.0
a[8]	-2.9	0.32	2.84	-8.4	-4.86	-2.86	-0.96	2.72	79	1.0
a[9]	-2.53	0.32	2.5	-7.32	-4.27	-2.6	-0.69	2.15	60	1.0
a[10]	-13.7	0.43			-16.45	-13.67	-11.1	-5.29	90	1.0
a[11]	-1.54	0.28	2.73	-6.73	-3.28	-1.49	0.25	3.93	96	1.0
a[12]	-1.7	0.35	2.76	-7.08	-3.7	-1.67	0.27	3.48	60	1.0
a[13]	2.98	0.35	2.65	-1.92	1.04	2.96	4.9	7.82	56	1.0
a[14]	1.17	0.42	3.28	-5.09	-1.2	1.23	3.58	7.21	60	1.0
a[15]	-2.73	0.38	3.01	-8.78	-4.71	-2.7	-0.51	2.57	64	1.0
a[16]	37.31	0.43	3.25	30.74	35.08	37.42	39.71	43.15	58	1.0
a[17]	2.66	0.43	4.0	-5.63	-0.02	2.81	5.48	10.11	84	1.0
a[18]	17.25	0.44	3.14	11.11	15.03	17.19	19.69	22.56	52	1.0
a[19]	-5.73	0.38		-11.81	-8.04	-5.59	-3.37	0.06	70	1.0
a[20]	10.11	0.41	3.55	2.97	7.83	10.05	12.61	16.81	75	1.0
a[21]	-15.16	0.44	3.64	-22.5	-17.75	-14.97	-12.51	-8.68	68	1.0
a[22]	19.25	0.33	3.16	12.72	17.12	19.29	21.48	25.18	94	1.0
a[23]	12.24	0.34	2.66	6.59	10.39	12.25	14.2	17.09	63	1.0
a[24]	1.61	0.41	3.4	-5.15	-0.77	1.7	4.04	8.02	70	1.0
a[25]	6.22	0.3	2.71	0.99	4.3	6.3	8.05	11.23	82	1.0
a[26]	26.42	0.59	4.69	17.18	23.12	26.34	29.76	35.19	63	1.0
a[27]	28.39	0.41	3.23	22.11	26.1	28.42	30.8	34.32	63	1.0
a[28]	8.24	0.45	3.36	1.74	5.88	8.32	10.64	14.61	55	1.0

a[29] a[30] a[31]	-22.79 23.06 7.87	0.55 0.32 0.32	4.32 3.17 2.65	-31.45 16.91 2.65	-25.79 20.84 5.96	-22.65 23.19 7.94	-19.64 25.34 9.79	-14.52 28.96 12.74	62 100 69	1.0 1.0 1.0
a[32] a[33] a[34]	7.02 0.68 12.17	0.41 0.28 0.53	3.15 2.7 4.47	1.21 -5.04 3.58	4.77 -1.2 9.17	7.0 0.73 12.24	9.3 2.58 15.44	12.87 5.75 20.8	59 92 70	1.0 1.0 1.0
a[35] a[36] a[37] b[1]	-8.95 0.9 20.87 -0.43	0.38 0.4 0.45 2.6e-3	4.06 2.93 3.16 0.05	-16.84 -4.95 14.81 -0.52	-11.56 -1.2 18.39 -0.46	-9.1 0.97 21.08 -0.43	-6.08 3.03 23.27 -0.39	-0.97 6.36 26.31 -0.32	115 53 50 366	1.0 1.0 1.0
b[2] mu_a sigma_a	0.71 0.76 14.33	0.01 0.05 0.14	0.1 0.99 2.07	0.54 -1.23 10.93	0.64 0.11 12.87	0.71 0.79 14.13	0.78 1.41 15.46	0.9 2.71 19.36	51 370 219	1.0
<pre>sigma_y y_hat[1] y_hat[2] y_hat[3]</pre>	6.71 21.56 21.37 16.42	6.6e-3 0.05 0.05 0.06	0.19 1.62 1.6 1.54	6.33 18.57 18.4 13.61	6.59 20.39 20.21 15.37	6.71 21.54 21.35 16.37	6.83 22.67 22.49 17.48	7.11 24.81 24.58 19.57	857 1177 1232 647	1.0 1.0 1.0
y_hat[4] y_hat[5] y_hat[6]	17.71 17.8 17.72	0.04 0.04 0.04	1.51 1.51 1.5	14.9 14.94 14.88	16.7 16.79 16.71	17.64 17.72 17.67	18.78 18.88 18.81	20.72 20.8 20.74	1513 1690 1784	1.0 1.0 1.0
<pre>y_hat[7] y_hat[8] y_hat[9] y_hat[10]</pre>	17.42 17.17 18.0 17.61	0.04 0.04 0.03 0.03	1.5 1.5 1.5	14.56 14.28 15.14 14.77	16.42 16.16 16.97 16.59	17.35 17.11 17.93 17.55	18.49 18.24 19.09 18.7	20.39 20.16 21.01 20.62	1761 1803 1856 1897	1.0 1.0 1.0
y_hat[11] y_hat[12] y_hat[13]	16.07 16.9 16.01	0.03 0.03 0.03	1.49 1.49 1.49	13.21 14.04 13.13	15.06 15.87 14.98	16.03 16.85 15.97	17.14 17.97 17.07	19.07 19.82 18.91	1851 1925 1962	1.0
y_hat[14] y_hat[15] y_hat[16] y_hat[17]	15.37 14.88 14.2 12.98	0.03 0.04 0.04 0.04	1.5 1.52 1.53 1.56	12.44 11.99 11.28 10.06	14.35 13.86 13.16 11.93	15.36 14.89 14.22 13.0	16.42 15.95 15.27 14.1	18.25 17.74 17.07 15.92	1897 1669 1633 1457	1.0 1.0 1.0
y_hat[18] y_hat[19] y_hat[20] y_hat[21]	13.08 13.5 17.8 17.31	0.04 0.05 0.06 0.06	1.59 1.6 1.76 1.76	10.08 10.4 14.38 13.87	12.02 12.48 16.58 16.1	13.1 13.52 17.89 17.38	14.2 14.66 19.03 18.54	16.08 16.53 21.23 20.77	1269 1080 926 775	1.0 1.0 1.0
y_hat [22] y_hat [23] y_hat [24]	19.09 21.28 23.55	0.04 0.05 0.1	1.74 1.78 1.89	15.72 17.74 19.8	17.88 20.04 22.27	19.16 21.27 23.51	20.27 22.51 24.82	22.43 24.86 27.47	1686 1087 385	1.0 1.0 1.0
<pre>y_hat [25] y_hat [26] y_hat [27] y_hat [28]</pre>	18.49 17.72 16.45 15.91	0.04 0.04 0.04 0.04	1.72 1.72 1.71 1.72	15.18 14.46 13.17 12.62	17.29 16.54 15.26 14.77	18.55 17.79 16.52 15.95	19.67 18.89 17.61 17.05	21.87 21.07 19.94 19.38	1911 2030 2060 2038	1.0 1.0 1.0
y_hat[29] y_hat[30] y_hat[31]	15.54 15.84 15.5	0.04 0.04 0.04	1.72 1.72 1.72	12.24 12.56 12.23	14.4 14.7 14.31	15.55 15.87 15.51	16.68 16.98 16.65	18.99 19.29 18.95	2110 2228 2228	1.0 1.0 1.0
<pre>y_hat[32] y_hat[33] y_hat[34] y hat[35]</pre>	15.29 14.1 13.92 17.27	0.04 0.04 0.04 0.03	1.72 1.74 1.74 1.42	12.05 10.83 10.66 14.57	14.08 12.91 12.72 16.33	15.29 14.1 13.91 17.28	16.44 15.27 15.1 18.26	18.75 17.55 17.39 20.02	2220 2092 2066 1809	1.0 1.0 1.0
y_hat[36] y_hat[37] y_hat[38]	17.03 16.87 16.32	0.03 0.03 0.03	1.41 1.41 1.4	14.35 14.2 13.64	16.09 15.92 15.38	17.04 16.89 16.31	17.99 17.83 17.27	19.73 19.58 19.06	2000 1984 1873	1.0 1.0 1.0
y_hat[39] y_hat[40] y_hat[41] y_hat[42]	15.51 15.73 15.48 14.91	0.03 0.03 0.03 0.03	1.39 1.39 1.39 1.38	12.88 13.09 12.83 12.28	14.57 14.78 14.53 13.98	15.48 15.71 15.46 14.9	16.47 16.68 16.42 15.86	18.21 18.43 18.17 17.62	1794 1807 1958 2319	1.0 1.0 1.0
y_hat[43] y_hat[44] y_hat[45] y_hat[46]	14.53 14.22 13.77 13.34	0.03 0.03 0.03 0.03	1.38 1.38 1.38 1.39	11.89 11.58 11.08 10.63	13.6 13.31 12.84 12.39	14.5 14.2 13.76 13.29	15.48 15.16 14.75 14.3	17.2 16.88 16.43 15.98	2312 2334 2007 1706	1.0 1.0 1.0
y_hat [47] y_hat [48] y_hat [49]	14.12 14.62 15.96	0.03 0.03 0.03	1.38 1.38 1.39	11.47 12.0 13.31	13.2 13.7 15.04	14.09 14.62 15.97	15.06 15.54 16.9	16.77 17.3 18.66	2263 2835 1805	1.0 1.0 1.0
y_hat[50] y_hat[51] y_hat[52] y_hat[53]	15.04 14.69 14.92 14.0	0.03 0.03 0.03 0.03	1.38 1.39 1.4 1.4	12.36 12.01 12.22 11.28	14.12 13.77 13.97 13.06	15.06 14.69 14.95 14.0	15.97 15.63 15.86 14.98	17.75 17.46 17.69 16.79	2549 2288 1727 1920	1.0 1.0 1.0
y_hat [54] y_hat [55] y_hat [56]	12.77 12.1 11.34	0.03 0.03 0.03	1.41 1.43 1.45	10.02 9.34 8.53	11.84 11.14 10.37	12.77 12.07 11.31	13.77 13.14 12.42	15.54 14.87 14.08	2156 1945 1742	1.0 1.0 1.0
y_hat[57] lp	2.48 -1525	0.08 0.26	2.11 4.89	-1.79 -1537	1.12 -1528	2.44 -1525	3.95 -1522	6.6 -1517	702 351	1.0