

**FREQUENCY DISTRIBUTIONS OF  
ENGLISH TRIGRAPHS**

Frequency distributions of English trigraphs appearing in 50,000 letters of government plaintext telegrams.

Table B-1. The 56 trigraphs appearing 100 or more times, arranged according to their absolute frequencies, accompanied by the logarithms of their assigned probabilities.

F	L <sub>10</sub> (F)	L <sub>586</sub> (F)	F	L <sub>10</sub> (F)	L <sub>586</sub> (F)	F	L <sub>10</sub> (F)	L <sub>586</sub> (F)
ENT.....569	2.76	.99	TOP .....174	2.24	.82	EIG .....135	2.13	.79
ION.....260	2.41	.88	NTH .....171	2.23	.82	FIV .....135	2.13	.79
AND.....228	2.36	.86	TWE .....170	2.23	.82	MEN .....131	2.12	.78
ING.....226	2.35	.86	TWO .....163	2.21	.81	SEV .....131	2.12	.78
IVE .....225	2.35	.86	ATI .....160	2.20	.81	ERS .....126	2.10	.78
TIO .....221	2.34	.85	THR.....158	2.20	.81	UND .....125	2.10	.78
FOR.....218	2.34	.85	NTY.....157	2.20	.81	NET.....118	2.07	.77
STO .....202	2.31	.84	REE .....146	2.16	.80	RED .....113	2.05	.76
EEN.....196	2.29	.84	SIX .....146	2.16	.80	TED .....112	2.05	.76
GHT.....196	2.29	.84	ASH .....143	2.16	.80	ERI .....109	2.04	.76
INE.....192	2.28	.83	DAS .....140	2.15	.79	HIR.....106	2.03	.75
VEN.....190	2.28	.83	IGH.....140	2.15	.79	IRT .....105	2.02	.75
EVE .....177	2.25	.82	ERE .....138	2.14	.79	DER .....101	2.00	.74
EST .....176	2.25	.82	COM .....136	2.13	.79	DRE.....100	2.00	.74
TEE .....174	2.24	.82	ATE .....135	2.13	.79			



ERE .....	138	2.14	.79	NTH .....	171	2.23	.82	THR.....	158	2.20	.81
EIG .....	135	2.13	.79	NTY.....	157	2.20	.81	TER.....	115	2.06	.76
ERS .....	126	2.10	.78	NET.....	118	2.07	.77	TED.....	112	2.05	.76
EQU.....	114	2.06	.76								
ERI .....	109	2.04	.76	OUR.....	211	2.32	.85	UND .....	125	2.10	.78
				ONE.....	210	2.32	.85				
FOR.....	218	2.34	.85	ORT.....	146	2.16	.80	VEN.....	190	2.28	.83
FOU.....	152	2.18	.80								
FIV .....	135	2.13	.79	PER .....	115	2.06	.76	WEN.....	153	2.18	.80

Table B-3. The 56 trigraphs appearing 100 or more times, arranged in alphabetic order by their second letters, then by absolute frequencies, accompanied by the logarithms of their assigned probabilities.

F	L <sub>10</sub> (F)	L <sub>586</sub> (F)	F	L <sub>10</sub> (F)	L <sub>586</sub> (F)	F	L <sub>10</sub> (F)	L <sub>586</sub> (F)			
DAS	140	2.15	.79	SIX	146	2.16	.80	ERS	126	2.10	.78
EEN	196	2.29	.84	EIG	135	2.13	.79	ERI	109	2.04	.76
VEN	190	2.28	.83	FIV	135	2.13	.79	IRT	105	2.02	.75
TEE	174	2.24	.82	HIR	106	2.03	.75	DRE	100	2.00	.74
WEN	153	2.18	.80	ENT	569	2.76	.99	EST	176	2.25	.82
REE	146	2.16	.80	AND	228	2.36	.86	ASH	143	2.16	.80
MEN	131	2.12	.78	ING	226	2.35	.86	STO	202	2.31	.84
SEV	131	2.12	.78	ONE	210	2.32	.85	NTH	171	2.23	.82
NET	118	2.07	.77	INE	192	2.28	.83	ATI	160	2.20	.81
PER	115	2.06	.76	UND	125	2.10	.78	NTY	157	2.20	.81
TER	115	2.06	.76	ION	260	2.41	.88	ATE	135	2.13	.79
RED	113	2.05	.76	FOR	218	2.34	.85	STA	115	2.06	.76
TED	112	2.05	.76	TOP	174	2.24	.82	OUR	211	2.32	.85
DER	101	2.00	.74	FOU	152	2.18	.80	IVE	225	2.35	.86
IGH	140	2.15	.79	COM	136	2.13	.79	EVE	177	2.25	.82
THI	211	2.32	.85	EQU	114	2.06	.76	TWE	170	2.23	.82
GHT	196	2.29	.84	HRE	153	2.18	.80	TWO	163	2.21	.81
THR	158	2.20	.81	ORT	146	2.16	.80				
TIO	221	2.34	.85	ERE	138	2.14	.79				
NIN	207	2.32	.85								

Table B-4. The 56 trigraphs appearing 100 or more times, arranged in alphabetic order by their third letters, then by absolute frequencies, accompanied by the logarithms of their assigned probabilities.

F	L <sub>10</sub> (F)	L <sub>586</sub> (F)	F	L <sub>10</sub> (F)	L <sub>586</sub> (F)	F	L <sub>10</sub> (F)	L <sub>586</sub> (F)			
STA .....	115	2.06	.76	THI.....	211	2.32	.85	TER .....	115	2.06	.76
AND.....	228	2.36	.86	ATI.....	160	2.20	.81	HIR.....	106	2.03	.75
UND .....	125	2.10	.78	ERI .....	109	2.04	.76	DER.....	101	2.00	.74
RED.....	113	2.05	.76	COM .....	136	2.13	.79	DAS .....	140	2.15	.79
TED.....	112	2.05	.76	ION.....	260	2.41	.88	ERS .....	126	2.10	.78
IVE.....	225	2.35	.86	NIN .....	207	2.32	.85	ENT.....	569	2.76	.99
ONE.....	210	2.32	.85	EEN .....	196	2.29	.84	GHT.....	196	2.29	.84
INE.....	192	2.28	.83	VEN .....	190	2.28	.83	EST .....	176	2.25	.82
EVE.....	177	2.25	.82	WEN .....	153	2.18	.80	ORT.....	146	2.16	.80
TEE.....	174	2.24	.82	MEN .....	131	2.12	.78	NET.....	118	2.07	.77
TWE.....	170	2.23	.82	TIO.....	221	2.34	.85	IRT.....	105	2.02	.75
HRE.....	153	2.18	.80	STO.....	202	2.31	.84	FOU.....	152	2.18	.80
REE.....	146	2.16	.80	TWO.....	163	2.21	.81	EQU.....	114	2.06	.76
ERE.....	138	2.14	.79	TOP.....	174	2.24	.82	FIV.....	135	2.13	.79
ATE.....	135	2.13	.79	FOR.....	218	2.34	.85	SEV.....	131	2.12	.78
DRE.....	100	2.00	.74	OUR.....	211	2.32	.85	SIX.....	146	2.16	.80
ING.....	226	2.35	.86	THR.....	158	2.20	.81	NTY.....	157	2.20	.81
EIG.....	135	2.13	.79	PER.....	115	2.06	.76				
NTH.....	171	2.23	.82								
ASH.....	143	2.16	.80								
IGH.....	140	2.15	.79								