

GRAPHICOL

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Sprung-

Non-Disziplinäre

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E005 4C DD C0 JMP #C0D5 Grafikmodus einschalten
E006 5C EA B0 JMP #D0F1 Grafikmodus ausschalten
E008 5C E1 JMP #C108 Grafiker Farben initialisieren
E007 5C E1 JMP #D144 nachfolgende Punkte setzen
E008 5C E1 JMP #C150 nachfolgende Punkte löschen
E007 4C B6 C1 JMP #C156 Punkt (x/y) setzen
E012 5C E1 JMP #C18F Punkt (x/y) testen, Ergebnis in 2
E013 5C E1 JMP #C2A6 Linie von (x0,y0) nach (x1,y1)
E018 5C E1 JMP #C2D6 Rechteck mit Eckpunkten (x0,y0), (x1,y1)
E018 5C E1 JMP #C307 ausgefülltes Rechteck
E01E 5C E1 JMP #C32E Kreis mit Mittelp.(xmid,ymid) u. Radius r
E021 4C B6 C3 JMP #C33E ausgefüllter Kreis
E024 4C B6 C1 JNF #C455 Fläche um (x/y) ausfüllen
E025 5C E1 JSR #E1F0 Komma Komma, Byte holen
E026 5C E1 JMPI #E79E Byte
E02D 5C E1 JSR #A1E6 Komma
E030 5C E1 JSR #A08A 10-Bit-Wert
E035 5C E1 JSR #B7F7 wandeln
E036 5C E1 LDA #15 Highbyte
E038 5C E1 CMP #02 größer 1
E03A 5C E1 BCS #C03D ja Fehler
E03E 5C E1 RTS zurück
E03D 4C B6 B2 JMP #B240 LEGAL QUANTITÄT
E040 5C E1 JSR #A186
E041 5C E1 LDA #01 auf RAM schalten
E043 5C E1 AND #1FD Bit 0+A löschen
E045 5C E1 STA #01 unrückschreiben
E047 5C E1 RTS Ende
E048 5C E1 JSR #A186
E04A 5C E1 ORA #02 auf ROM schalten
E04C 5C E1 STA #01
E04E 5C E1 CLI Interv. löschen
E050 5C E1 RTS Ende
E051 5C E1 LDA #A5 Punktsetzer
E052 5C E1 BEQ #C05E Null
E053 5C E1 CMP #01 1?
E055 5C E1 DNE #C06A nein, RTS
E05B 5C E1 LDA #A4 low
E05D 5C E1 CMP #10 64?
E05E 5C E1 BCS #C05A größer, RTS
E05E 5C E1 LDA #A3 low-Byte
E058 5C E1 CMP #100 130
E062 5C E1 BCC #C066 kleiner
E064 5C E1 RTS
E065 5C E1 LDA #00
E067 5C E1 STA #FB
E069 5C E1 STA #FC
E06D 5C E1 LDA #A2 Y-Wert
E06E 5C E1 AND #197 unterste 3 Bits
E071 5C E1 TAY nach Y
E073 5C E1 LDA #A6
E074 5C E1 AND #1FB
E075 5C E1 ASL
E076 5C E1 ROL #FC
E078 5C E1 ASL
    
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C079 5C FC RDL #FC
C07B 5C FC ASL
C07C 5C FC ROL #FC
C07E 5C FB STA #FB
C080 5C TXN
C081 5C LSR
C082 5C LSR
C083 5C LSR
C084 5C ADC #FC
C086 5C FC STA #FC
C088 5C TYA
C087 5C FE ADD #FE
C08D 5C FE STA #FE
C09D 5C AT LDA #A4
C09F 5C 07 AND #07
C071 5C 07 TAY
C072 5C A1 LDA #A1
C074 5C FB AND #FB
C096 5C CLC
C097 5C FE ADC #FE
C097 5C FB STA #FB
C098 5C FC LDA #FC
C09D 5C AB ADC #AB
C07F 5C B0 ADC #B0
C0A1 5C FC STA #FC
C0A3 5C 00 LDA #00
C0A5 5C SEC
C0A6 5C ROR
C0A7 5C DEY
C0A8 5C FC ERL #C0AC
C0A9 5C A7 STA #A7
C0AC 5C RTS
C0AE 5C 00 LDA #00 Punktsetzer Muster
C0D1 5C 00 BEQ #C0DF weiß
C0B3 5C 50 C0 JSR #D050 Punktposition holen
C0B5 5C 00 LDY #00
C0B8 5C FD LDA (#FB), Y holen
C0BA 5C A7 ORA #A7 mit Bitmuster
C0BC 5C FB STA (#FB), Y ablegen
C0BE 5C RTS
C0BF 5C 50 C0 JSR #C050 Punktposition
C0C2 5C 00 LDY #00
C0C4 5C A7 LDA #A7 Bitmuster
C0C5 5C FF EOR #FF invertieren
C0C8 5C FB AND (#FB), Y und
C0CA 5C FB STA (#FB), Y ablegen
C0CC 5C RTS
C0CD 5C 50 C0 JSR #C050 Punkt setzen
C0DD 5C 00 LDY #00 Y:0
C0DE 5C SEC
C0E3 5C A7 LDA #A7 Bitmuster
C0E5 5C FB AND (#FB), Y und
C0E7 5C 00 BNE #C0DA
C0E9 5C CLC Null
C0DA 5C RTS
C0DB 5C 00 LDA #DD00 LIA-Register laden
C0DD 5C FC AND #1FC 10000000 Bit 0+A löschen
C0E0 5C 00 B0 STA #DD00 zurückschreiben
C0E3 5C 00 LDA #D01 ...
C0E6 5C 20 ORA #20 10000000 Bit 5 setzen
    
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Graphic
ein

RAM 700

Punkt testen

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COE8 8D 10 D0 STA #D011 zurückschreiben
COE8 8D 10 D0 LDA #355 Grafik 2000, Farb-RAM 3000
COE8 8D 10 D0 STA #D010 in VIC-Register 24 schreiben
COE9 8D 10 D0 RTS und zurück Grafik ausschalten
COF1 AD 09 D0 LDA #D000
COF4 8D 09 D0 ORA #303 Bit 0+1 setzen
COF6 8D 09 D0 STA #D000 zurückschreiben
COF9 8D 09 D0 LDA #D011
COFE 27 DF DF AND #3DF XXXX
COFE 8D 11 D0 STA #D011 zurückschreiben
C101 8D 09 D0 LDA #F14
C103 8D 09 D0 STA #D010
C104 8D 09 D0 RTS zurück
C107 0A 09 D0 ARL
C108 20 27 E0 JSR #C027 Komma, Byte holen
C10B 0A 09 D0 TXA nach Akkur (Zeichenfarbe)
C10C 0A 09 D0 ABL
C10D 0A 09 D0 ABL } XXXX x16, als High-Nibble
C10E 0A 09 D0 ABL
C10F 0A 09 D0 ABL
C110 8D 07 C1 STA #C107 zwischenspeichern
C113 20 27 E0 JSR #C027 Komma, Hintergrund
C114 0A 09 D0 TXA nach Akkur
C117 27 0F DF AND #30F High-Nibble löschen
C119 8D 20 D0 STA #D020 in Hintergrund
C11C 0D 07 C1 BRA #C107 High-Nibble dazu
C11F 8D 07 C1 STA #D010 und abspeichern
C122 A9 E0 D0 LDA #3E0
C124 8D FC FC STA #FC High-Byte
C126 A9 00 D0 LDA #300 (Null) } von 8E000
C128 8D FB FB STA #FB lowbyte }
C12A A0 00 D0 LDY #400 Zähler
C12C 83 20 D0 LDX #420 Zähler (20 Pages)
C12E 91 FB FB STA #FB, Y Grafik löschen
C130 EB FB FB INY weiterzählen
C131 D0 FB FB BNE #C12E LOOP
C133 E6 FC FC INC #FC High-Byte erhöhen
C135 DA DA DEX x decr.
C136 D0 FB FB BNE #C12E LOOP
C138 AD 07 C1 LDA #C107 Farbkombination
C13D 97 00 C0 STA #C000, in
C13E 92 00 CD STA #C000, Y Farb-
C141 97 00 CE STA #CE00, Y RAM
C144 97 00 CF STA #CF00, Y schreiben
C147 8B 07 C1 INY
C148 D0 FB FB BNE #C13D LOOP nichtly. Date. setzen
C14A 87 07 C1 LDA #3FF zeigen für Zeichnen
C14C 8D AD C0 STA #C0AD setzen
C14F 8D 09 D0 RTS zurück
C150 87 00 C1 LDM #400 Flag für Löschen
C152 8D AD C0 STA #C0AD setzen
C155 8D 09 D0 RTS
C156 20 2D C0 JSR #C02D X-Wert Punkt setzen
C159 8D 14 14 LDA #14 um-
C15B 85 A1 STA #A1 speichern
C15D 85 15 15 LDA #15 nach
C15F 85 A5 STA #A5 $A4/A5
C161 20 27 C0 JSR #C027 Komma, Y-Wert
C164 86 A6 STX #A6 ablegen
C167 20 40 C0 JSR #C040 auf RAM schalten
C169 20 4E C0 JSR #C04E Punkt setzen
C16C 4E 1B C0 JMP #C04E ROM
  
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C16F 20 2D C0 JSR #C02D X-Wert holen
C172 85 14 14 LDA #14 um-
C174 85 A4 STA #A4 Speicher-
C176 85 15 15 LDA #15 chern
C178 85 A5 STA #A5
C17A 20 27 C0 JSR #C027 Komma, Y-Wert
C17D 86 A6 STX #A6 ablegen
C17F 20 40 C0 JSR #C040 RAM
C182 20 CD C0 JSR #C0CD Punkt testen
C185 87 00 00 LDA #400 Null
C187 2A 00 00 ROL Carry einsetzen
C188 85 02 02 STA #02 ablegen
C18A 4E 1B C0 JMP #C04E ROM
C18D 38 00 00 SEC Carry setzen (Subtraktion)
C18E 85 AD AD LDA #AD Y-Ende
C190 85 AA AA SBC #AA minus Y-Anfang
C192 80 0D 0D BCS #D1A1 Y-Ende größer Y-Anf.
C194 49 FF FF EOR #FF } 256-Abstand-Y
C196 18 00 00 CLC
C197 67 01 01 ADC #01
C198 85 B3 B3 STA #B3 } $FF für Addition
C199 85 B3 B3 LDA #FF } Konstante für Addition
C19D 85 B3 B3 STA #B3 } unbed.
C19F 30 06 06 DRI #C1A7
C1A1 85 D0 D0 STA #D0 Y-Abstand ablegen
C1A3 A9 01 01 LDA #01 } $01 für Addition
C1A5 85 B3 B3 STA #B3 } Konstante für Addition
C1A7 30 06 06 SEC
C1A8 85 B3 B3 LDA #B3 X-Ende (low)
C1A9 85 B3 B3 STA #B3 minus X-Anfang (low)
C1AB 85 AC AC LDA #AC Y-Ende high
C1AD 85 AC AC STA #AC } ablegen
C1AE 85 AC AC LDA #AC Y-Ende high
C1B0 E5 A9 A9 BCC #A9 minus X-Anfang high
C1B2 85 AF AF STA #AF ablegen
C1B4 10 1D 1D BPE #C1D1 X-Ende > X-Anfang
C1B6 18 00 00 CLC
C1B7 85 AE AE LDA #AE } $AE = 256 - $AE
C1B9 49 FF FF EOR #FF } $AE umdrehen
C1BB 87 01 01 ADC #01 } $AE umdrehen
C1BD 85 AE AE STA #AE } (High-Byte)
C1BF 85 AF AF LDA #AF } $AF umdrehen
C1C1 49 FF FF EOR #FF } $AF umdrehen
C1C3 69 00 00 ADC #00 } (High-Byte)
C1C5 85 AF AF STA #AF } $FFFF
C1C7 A9 FF FF LDA #FFF } Konstante für Addition (-> Subtr.)
C1C9 85 B1 B1 STA #B1 } unbed.
C1CB 85 B2 B2 LDA #FF } $0001
C1CD 85 B2 B2 STA #B2 } Konst. für Add.
C1CF 30 00 00 DRI #C1D9
C1D1 A9 01 01 LDA #01 }
C1D3 85 B1 B1 STA #D1 }
C1D5 A9 00 00 LDA #00 }
C1D7 85 B2 B2 STA #D2 }
C1D9 85 AF AF LDA #AF }
C1DB 85 B5 B5 STA #B5 } unrück
C1DD 85 AE AE LDA #AE } (11.04.1983)
C1DF 85 B4 B4 STA #B4 }
C1E1 A5 A5 LDA #A5 }
C1E3 85 A4 A4 STA #A4 }
C1E5 85 A9 A9 LDA #A9 }
C1E7 85 A5 A5 STA #A5 }
  
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X: \$A4/A5 2 Punkt-Koordinaten
 Y: \$A6

GEATHTOOL

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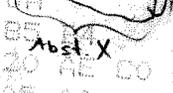
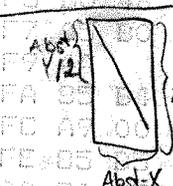
01E9 A5 AA LDA #AA } akt. Punkt Y =
01EB B5 A6 STA #A6 } Startpkt. Y
01ED B5 AF LDA #AF Abstand-X high
01EF D0 4C BNE #C23D nicht 0
01F1 A5 AE LDA #AE Abstand-X low
01F3 C5 D0 CMP #D0 Abstand-Y
01F5 B0 41 BCS #C23D A-X > A-Y
01F7 B0 41 LDA #D0 Abstand-Y
01F9 B5 D1 LSR } 12
01FB B5 D1 STA #B4
01FD A5 00 LDA #400 } High-Byte
01FE B5 00 STA #B5 }
0200 20 00 JSR #C0AE Punkt setzen
0203 A5 A6 LDA #A6 } akt. Punkt Y
0205 C5 AD CMP #AD = Y-Ende?
0207 F0 33 BEQ #C23C ja, RTS
0209 18 00 CLC
020A A5 A6 LDA #A6 akt. Punkt Y
020C 45 B3 ABC #B3 erhöhen/erniedrigen
020E B5 A6 STA #A6 speichern
0210 18 00 SEC
0211 A5 B4 LDA #B4
0213 E5 AE SBC #AE } $B4/5 = $B4/5 - Abst-X
0215 B5 D4 STA #D4
0217 A5 B5 LDA #B5
0219 E5 AF SBC #AF
021B B5 B5 STA #B5
021D B0 E1 BCS #C200 kein Unterlauf
021F 18 00 CLC
0220 A5 B4 LDA #B4
0222 45 D0 ADC #D0 } $B4/5 = $B4/5 + Abst-Y
0224 B5 D4 STA #D4
0226 A5 D5 LDA #D5
0228 27 00 ADC #400
022A B5 B5 STA #B5
022C 18 00 CLC
022D A5 A4 LDA #A4
022F 45 D1 ADC #D1
0231 B5 A4 STA #A4
0233 A5 A5 LDA #A5
0235 45 B2 ADC #B2
0237 B5 A5 STA #A5
0239 40 00 B2 JMR #C200 } nächster Punkt
023C 60 00 RTS
023D A5 A4 LDA #A4 X-Abstand high
023F 18 00 LSR } in Carry
0240 B5 B5 STA #B5 } 0 in $B5
0242 A5 A4 LDA #A4 X-Abst. low
0244 18 00 LSR } 12 teilen, MSB dazu
0245 B5 B5 STA #B5 } ablegen
0247 20 00 JSR #C0AE Punkt setzen
024A A5 A4 LDA #A4 akt. Punkt X (low)
024C C5 AB CMP #AB = X-Ende? (low)
024E D0 06 BNE #C2B8 nein
0250 A5 A5 LDA #A5 akt. Punkt X (high)
0252 C5 AC CMP #AC = X-Ende? (high)
0254 F0 E6 BEQ #C23C ja, RTS
0257 18 00 CLC
0259 A5 A4 LDA #A4 } akt. Punkt X
025B 45 B1 ADC #B1 } erhöhen/erniedrigen
025D B5 A4 STA #A4
025F A5 A5 LDA #A5

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025F C5 B2 ADC #B2
0261 B5 A5 STA #A5
0263 38 00 SEC
0264 A5 B4 LDA #B4
0266 E5 D0 SBC #D0 } $B4/5 = $B4/5 - 10 Abst
0268 B5 B4 STA #B4
026A A5 B5 LDA #B5
026C E7 00 SBC #100
026E B5 B5 STA #B5
0270 D0 B5 BCS #C247 kein Unterlauf
0272 18 00 CLC
0273 A5 B4 LDA #B4
0275 45 AE ADC #AE } $B4/5 = $B4/5 + Abst-X
0277 B5 B4 STA #B4
0279 A5 B5 LDA #B5
027B 45 AF ADD #AF
027D B5 B5 STA #B5
027F 18 00 CLC
0280 A5 A6 LDA #A6
0282 45 B3 ADC #B3
0284 B5 A6 STA #A6
0286 4C 47 C2 JMP #C247 Param. holen
0289 20 00 JSR #C02D X-Wert
028C A5 14 LDA #14 um-
028E B5 A8 STA #A8 Spei-
0290 A5 15 LDA #15 chenn
0292 B5 A9 STA #A9 Y-Wert
0294 20 27 C0 JSR #C027 Y-Wert
0297 B4 AA STX #AA ablegen
0299 20 2D C0 JSR #C02D 16-Bit-Wert
029C A5 14 LDA #14 um-
029E B5 AB STA #AB Speid-
02A0 A5 15 LDA #15 chenn
02A2 B5 AC STA #AC
02A4 20 27 C0 JSR #C027 Y-Wert
02A7 B5 AD STX #AD ablegen
02A9 30 00 RTS Ende
02AB 20 97 C2 JSR #C297 Parameter holen
02AD 20 10 C0 JSR #C040 RAM!
02B0 20 9D C1 JSR #C19D Line!
02B5 40 18 C0 JMI #C048 ROM, Ende
02B8 20 B7 C2 JSR #C2B7
02B9 20 40 C0 JSR #C040
02BC A5 AD LDA #AD
02BE B5 B6 STA #B6
02C0 A5 A4 LDA #AA
02C2 B5 AD STA #AD
02C4 20 5D C1 JCR #C18D
02C7 A5 B6 LDA #B6
02C9 A6 AA LDX #AA
02CB B6 B6 STX #B6
02CD B5 AA STA #AA
02CF B5 AD STA #AD
02D1 20 9D C1 JSR #C18D
02D4 A5 B6 LDA #B6
02D6 B5 AA STA #AA
02D8 A5 AD LDA #AD
02DA B5 B6 STA #B6
02DC A5 AC LDA #AC
02DE B5 B7 STA #B7
02E0 A5 AB LDA #AB

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$\$B4/5 := B4/5 - 10 \text{ Abst}$

$\$B4/5 := \$B4/5 + \text{Abst-X}$

$\$B4/5 := \$B4/5 - \text{Abst-X}$

$\$B4/5 := \$B4/5 + \text{Abst-Y}$

$\$B4 := X \cdot \text{Abst} / 2$

$\$A8/A9$ X } Anfang
 $\$AA$ Y }
 $\$AB/AC$ X } Ende
 $\$AD$ Y }

GRAPH002

.,C2E2	85	AB	STA	AB	.,C366	85	B7	STA	B7		
.,C2E4	A5	A9	LDA	A9	.,C368	20	40	CO	JSR	C040	
.,C2E6	85	AC	STA	AC	.,C36B	A5	AC	LDA	AC		
.,C2E8	20	8D	C1	JSR	C18D	.,C36D	85	B3	STA	B3	
.,C2EB	A5	B6	LDA	B6	.,C36F	A5	AD	LDA	AD		
.,C2ED	85	AB	STA	AB	.,C371	85	B4	STA	B4		
.,C2EF	A5	B7	LDA	B7	.,C373	A9	00	LDA	#00		
.,C2F1	85	AC	STA	AC	.,C375	85	B1	STA	B1		
.,C2F3	A5	AB	LDA	AB	.,C377	85	B2	STA	B2		
.,C2F5	85	B6	STA	B6	.,C379	A4	AE	LDY	AE		
.,C2F7	A5	A9	LDA	A9	.,C37B	A2	08	LDX	#08		
.,C2F9	85	B7	STA	B7	.,C37D	98		TYA			
.,C2FB	85	AB	LDA	AB	.,C37E	4A		LSR			
.,C2FD	85	AB	STA	AB	.,C37F	AB		TAY			
.,C2FF	A5	AC	LDA	AC	.,C380	90	0D	BCC	C38F		
.,C301	85	A9	STA	A9	.,C382	1B		CLC			
.,C303	20	8D	C1	JSR	C18D	.,C383	A5	B3	LDA	B3	
.,C306	4C	48	CO	JMP	C048	.,C385	85	B1	ADC	B1	
.,C309	20	89	C2	JSR	C289	.,C387	85	B1	STA	B1	
.,C30C	20	40	CO	JSR	C040	.,C389	A5	B4	LDA	B4	
.,C30F	A5	AA	LDA	AA	.,C38B	65	B2	ADC	B2		
.,C311	05	AD	CMP	AD	.,C38D	85	B2	STA	B2		
.,C313	98	08	BCC	C31D	.,C38F	06	B3	ASL	B3		
.,C315	A5	AA	LDA	AA	.,C391	26	B4	ROL	B4		
.,C317	A6	AD	LDX	AD	.,C393	CA		DEX			
.,C319	86	AA	STX	AA	.,C394	00	E7	BNE	C37D		
.,C31B	85	AD	STA	AD	.,C396	A9	01	LDA	#01		
.,C31D	A5	AD	LDA	AD	.,C398	85	B5	STA	B5		
.,C31F	85	B6	STA	B6	.,C39A	A9	00	LDA	#00		
.,C321	A5	AA	LDA	AA	.,C39C	85	B6	STA	B6		
.,C323	85	AD	STA	AD	.,C39E	85	B0	STA	B0		
.,C325	20	8D	C1	JSR	C18D	.,C3A0	A5	B8	LDA	B8	
.,C328	A5	AA	LDA	AA	.,C3A2	30	0A	BMI	C3AE		
.,C32A	05	B6	CMP	B6	.,C3A4	A5	B7	LDA	B7		
.,C32C	F0	07	BEQ	C335	.,C3A6	05	B0	CMP	B0		
.,C32E	E6	0A	INC	AA	.,C3A8	B0	07	BCS	C3B1		
.,C330	E6	AD	INC	AD	.,C3AA	A5	B0	LDA	B0		
.,C332	4C	25	C3	JMP	C325	.,C3AC	85	B7	STA	B7	
.,C335	4C	48	CO	JMP	C048	.,C3AE	20	F0	C5	JSR	C3F0
.,C338	A9	00	LDA	#00	.,C3B1	38		SEC			
.,C33A	85	BB	STA	BB	.,C3B2	A5	B1	LDA	B1		
.,C33C	F0	04	BEQ	C342	.,C3B4	E5	B5	SEC	B5		
.,C33E	A9	FF	LDA	#FF	.,C3B6	85	B1	STA	B1		
.,C340	85	B8	STA	B8	.,C3B8	A5	B2	LDA	B2		
.,C342	20	2D	CO	JSR	C02D	.,C3BA	E5	B6	SEC	B6	
.,C345	A5	14	LDA	14	.,C3BC	85	B2	STA	B2		
.,C347	85	AB	STA	AB	.,C3BE	00	1E	BCS	C3DE		
.,C349	A5	15	LDA	15	.,C3C0	20	F0	C5	JSR	C3F0	
.,C34B	85	A9	STA	A9	.,C3C3	38		SEC			
.,C34D	20	27	CO	JSR	C027	.,C3C4	A5	AC	LDA	AC	
.,C350	86	AA	STX	AA	.,C3C6	E7	01	BCC	#01		
.,C352	20	27	CO	JSR	C027	.,C3C8	85	AC	STA	AC	
.,C355	8A		TXA		.,C3CA	A5	AD	LDA	AD		
.,C356	85	AB	STA	AB	.,C3CC	E7	00	SEC	#00		
.,C358	85	AF	STA	AF	.,C3CE	85	AD	STA	AD		
.,C35A	0A		ASL		.,C3D0	E6	AE	INC	AE		
.,C35B	85	AC	STA	AC	.,C3D2	38		SEC			
.,C35D	A9	00	LDA	#00	.,C3D3	A5	AF	LDA	AF		
.,C35F	2A		ROL		.,C3D5	E7	01	SEC	#01		
.,C360	85	AD	STA	AD	.,C3D7	85	AF	STA	AF		
.,C362	A9	00	LDA	#00	.,C3D9	B0	90	BCS	C36B		
.,C364	85	AE	STA	AE							

GRAPH TOOL

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.,C3DE 4C 4B C0 JMP #C04B
.,C3DE E6 B0 INC #B0
.,C3E0 1B CLC
.,C3E1 A5 B5 LDA #B5
.,C3E3 69 02 ADC #02
.,C3E5 B5 B5 STA #B5
.,C3E7 A5 B6 LDA #B6
.,C3E9 69 00 ADC #00
.,C3EB B5 B6 STA #B6
.,C3ED 4C A0 C3 JMP #C3A0
.,C3F9 1B CLC
.,C3F1 A5 A8 LDA #A8
.,C3F3 65 AF ADC #AF
.,C3F5 B5 A4 STA #A4
.,C3F7 A5 A9 LDA #A9
.,C3F9 69 00 ADC #00
.,C3FB B5 A5 STA #A5
.,C3FD 1B CLC
.,C3FE A5 AA LDA #AA
.,C400 65 B0 ADC #B0
.,C402 B5 A6 STA #A6
.,C404 B0 03 BCS #C407
.,C406 20 AE C0 JSR #C0AE
.,C409 3B SEC
.,C40A A5 A8 LDA #A8
.,C40C E5 AF SBC #AF
.,C40E B5 A4 STA #A4
.,C410 A5 A9 LDA #A9
.,C412 E9 00 SBC #00
.,C414 B5 A5 STA #A5
.,C416 1B CLC
.,C417 A5 AA LDA #AA
.,C419 65 B0 ADC #B0
.,C41B B5 A6 STA #A6
.,C41D B0 03 BCS #C422
.,C41F 20 AE C0 JSR #C0AE
.,C422 1B CLC
.,C423 A5 A8 LDA #A8
.,C425 65 AF ADC #AF
.,C427 B5 A4 STA #A4
.,C429 A5 A9 LDA #A9
.,C42B 69 00 ADC #00
.,C42D B5 A5 STA #A5
.,C42F 3B SEC
.,C430 A5 AA LDA #AA
.,C432 E5 B0 SBC #B0
.,C434 B5 A6 STA #A6
.,C436 70 03 BCC #C43B
.,C438 20 AE C0 JSR #C0AE
.,C43B 3B SEC
.,C43C A5 A8 LDA #A8
.,C43E E5 AF SBC #AF
.,C440 B5 A4 STA #A4
.,C442 A5 A9 LDA #A9
.,C444 E9 00 SBC #00
.,C446 B5 A5 STA #A5
.,C448 3B SEC
.,C449 A5 AA LDA #AA
.,C44B E5 B0 SBC #B0
.,C44D B5 A6 STA #A6
.,C44F 90 03 BCC #C454
.,C451 20 AE C0 JSR #C0AE
.,C454 60 RTS
.,C455 20 2D C0 JSR #C02D
.,C458 A5 14 LDA #14
.,C45A B5 A4 STA #A4
.,C45C A5 15 LDA #15
.,C45E B5 A5 STA #A5
.,C460 20 27 C0 JSR #C027
.,C463 B6 A6 STX #A6
.,C465 20 40 C0 JSR #C040
.,C468 A9 00 LDA #00
.,C46A B5 AA STA #AA
.,C46C A9 FF LDA #FF
.,C46E B5 A8 STA #A8
.,C470 B5 A9 STA #A9
.,C472 3B SEC
.,C473 A5 A4 LDA #A4
.,C475 E9 01 SBC #01
.,C477 B5 A4 STA #A4
.,C479 A9 A5 LDA #A5
.,C47B E9 00 SBC #00
.,C47D B5 A5 STA #A5
.,C47F 90 05 BCC #C486
.,C481 20 CD C0 JSR #C0CD
.,C484 90 EC BCC #C472
.,C486 1B CLC
.,C487 A5 A4 LDA #A4
.,C489 69 01 ADC #01
.,C48B B5 A4 STA #A4
.,C48D A5 A5 LDA #A5
.,C48F 69 00 ADC #00
.,C491 B5 A5 STA #A5
.,C493 A5 A5 LDA #A5
.,C495 F0 06 BEQ #C49D
.,C497 A5 A4 LDA #A4
.,C499 C9 40 CMP #40
.,C49B B0 0E BCS #C4AB
.,C49D 20 CD C0 JSR #C0CD
.,C4A0 B0 09 BCS #C4AB
.,C4A2 20 CA C4 JSR #C4CA
.,C4A5 20 D3 C0 JSR #C0D3
.,C4A8 4C B6 C4 JMP #C4B6
.,C4AB 3B SEC
.,C4AC A5 AA LDA #AA
.,C4AE E9 01 SBC #01
.,C4B0 B5 AA STA #AA
.,C4B2 90 13 BCC #C4B7
.,C4B4 A8 TAY
.,C4B5 B9 00 CB LDA #CB00,Y
.,C4B8 B5 A4 STA #A4
.,C4BA B7 00 C9 LDA #C900,Y
.,C4BD B5 A5 STA #A5
.,C4BF B9 00 CA LDA #CA00,Y
.,C4C2 B5 A6 STA #A6
.,C4C4 4C 6C C4 JMP #C46C
.,C4C7 4C 48 C0 JMP #C048
.,C4CA 3B SEC
.,C4CC A5 A6 LDA #A6
.,C4CD E9 01 SBC #01
.,C4CF B5 A6 STA #A6
.,C4D1 90 17 BCC #C4EA

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.,C4D3 20 CD C0 JSR #C0CD
.,C4D6 B0 0E BCS #C4E6
.,C4D8 A5 A8 LDA #A8
.,C4DA F0 0E BEQ #C4EA
.,C4DC A9 00 LDA #00
.,C4DE B5 A8 STA #A8
.,C4E0 20 14 C5 JSR #C514
.,C4E3 4C EA C4 JMP #CAEA
.,C4E6 A9 FF LDA #FF
.,C4E8 B5 A8 STA #A8
.,C4EA 1B CLC
.,C4EB A5 A6 LDA #A6
.,C4ED 69 02 ADC #02
.,C4EF B5 A6 STA #A6
.,C4F1 C9 C8 CMP #C8
.,C4F3 B0 17 BCC #D50C
.,C4F5 20 CD C0 JSR #C0CD
.,C4F8 B0 0E BCS #C50B
.,C4FA A5 A9 LDA #A9
.,C4FC F0 0E BEQ #D50C
.,C4FE A9 00 LDA #00
.,C500 B5 A9 STA #A9
.,C502 20 14 C5 JSR #C514
.,C505 4C 0C C5 JMP #C50C
.,C508 A9 FF LDA #FF
.,C50A B5 A9 STA #A9
.,C50C 38 SEC
.,C50D A5 A6 LDA #A6
.,C50F E9 01 SBC #01
.,C511 B5 A6 STA #A6
.,C513 60 RTS
.,C514 A4 AA LDY #AA
.,C516 A5 A4 LDA #A4
.,C518 99 00 C8 STA #C800,Y
.,C51B A5 A5 LDA #A5
.,C51D 99 00 C9 STA #C900,Y
.,C520 A5 A6 LDA #A6
.,C522 99 00 CA STA #CA00,Y
.,C525 E6 AA INC #AA
.,C527 60 RTS
.,C528 00 BRK
.,C529 00 BRK
.,C52A 00 BRK
.,C52B 00 BRK
.,C52C 00 BRK
.,C52D 00 BRK
.,C52E 00 BRK
.,C52F 00 BRK
.,C530 00 BRK
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\$AE/\$AF k-Abstand