

:Dana Densmore :

2022-03-15

Contents

	7
.....	7
	9
	11
	13
(Elements)	13
.....	13
“ ... ”(Therefore, etc.)	14
“ ”(Q.E.D. and Q.E.F.)	14
.....	14
.....	14
	15
.....	15
.....	15
1.1	15
1.2	16
1.3	16
1.4	16
1.5	17
1.6	17

1.7	17
1.8	17
1.9	17
1.10	17
1.11	17
1.12	18
1.13	18
1.14	18
1.15	18
1.16	19
1.17	19
1.18	19
1.19	19
1.20	19
1.21	19
1.22	19
1.23	20
2	21
2.1	21
2.2	22
3	23
.	23
.	23
3.1	24
3.2	24
3.3	25
3.4	26
3.5	27
3.6	28
3.7	28

<i>CONTENTS</i>	5
3.8	29
3.9	30
3.10	30
3.11	31
3.12	31
3.13	32
3.14	33
3.15	33
3.16	34
3.17	35
3.18	35
3.19	36
3.20	36
3.21	37
3.22	38
3.23	38
3.24	39
3.25	40
3.26	40
3.27	41
3.28	42
3.29	42
3.30	43
3.31	44
3.32	44
3.33	45
3.34	45
3.35	46
3.36	47
3.37	48
3.38	48

3.39	49
3.40	*	49
3.41	50
3.42	51
3.43	51
3.44	52
3.45	52
3.46	53
3.47	54
3.48	55
	56
		57
		61

<Euclid's Elements Book One With Questions for Discussion>

2022 3 11

2016	2019	2020	github
blogdown	xuanqi.life	bookdown	

2016 11 20

Mr.Donahue with Questions for Discussion	Dana Densmore “	Euclid's Elements Books One ” Mr. Donahue Mrs.Densmore
---	--------------------	--

Dana Densmore

2015 6

" "

/

Thomas L.Heath
of Perga ()

()
262

" " "

347

A

Heath 3 Heath,
Proclus(410-485)

(Elements)

Proclus Elements

Element “ ” “ ”

-
-
-
-
-
-

” ” QEF ”QED”

/

“ ...”(Therefore, etc.)

“ ”	“ ” Q.E.D.	“ ”	1482	Clavius 1574	Commandino 1572
Heath	Heath			Heath	...

“ ”(Q.E.D. and Q.E.F.)

Q.E.D.	“quod erat demonstrandum”	“o{per e[dei dei’xai
”	“ ” Q.E.D	
Q.E.F.	“quod erat faciendum”	“o{per e[dei poihi’sai”.
	“ ”	
	Q.E.F.	

“

”

“

“

Chapter 1

- wiki-
- “ ”
-
- true real (reality)

1.1

-
-

• “ ”
•
•
•
• “ ”

“ ”
“ ”
“ ”

1.2

•
• “ ”
•

1.3

•
•

1.4

•
•

1.5.

17

1.5

1.6

1.7

“ ”

—

1.8

1.9

1.10

•

•

•

“ ”

1.11

1.12**1.13**

/ ()

- boundaries (limits)
- extremity (boundary)

1.14

• “ ” “ ”

extremity

- (extremity)
- (extremity)
- / (extremity)

“/”

2003

1.15

-
-
-

1.16.

19

1.16

1.17

•

“bisect”

•

1.18

1.19

1.20

1.21

1.22

1.23

•
•
•

Chapter 2

2.1

-
-
-
-
-
-
-
-
-
- “ ”
- “ ”

1-3

-
-
-

-
- -
-
- “ ”

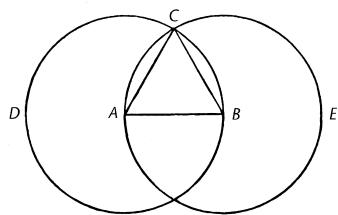
2.2

- “ ”
- “ ” “common”
-
- —
-
-
- “ ”

Chapter 3

()

-
- *
- " "
- " "
-
-
-
-
-
- *

3.1

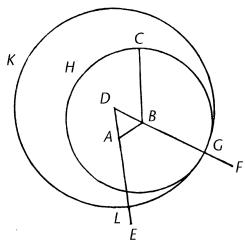
AB

AB	A	AB	BCD	3
B	BA	ACE	3	C
A	CDB	AC	AB	15
B	CAE	BC	BA	15
CA	AB	CA,CB	AB	
1	CA	CB		
CA, AB, BC				
ABC		AB		

“ C ”

3.2

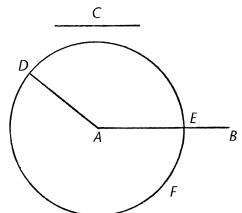
[]



A BC
 A BC
 A B AB 1 DAB I.1
 DA,DB AE,BF. 2
 B BC CGH 3
 D DG GKL 3
 B CGH BC BG
 D GKL DL DG.
 DA DB AL BG 3
 BC BG AL,BC BG
 1 AL BC
 A AL BC

[Heath]

3.3

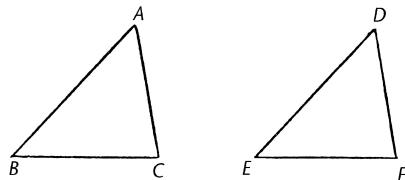


AB,C AB
 AB C
 A AD C I.2 A AD DEF 3
 A DEF AE AD 15
 C AD,
 AE,C AD AE C 1
 AB,C AB AE C

• 2 A BC
 • 3 C AB 2 3 3 3 1

greater/less

3.4



ABC DEF AB AC DE DF AB DE AC DF BAC EDF
 BC EF ABC DEF ABC DEF ACB DFE
 ABC DEF A D AB DE B E AB DE
 AB DE AC DF BAC EDF;
 C F AC DF
 B E BC EF 4
 ABC DEF 4
 ABC DEF ACB DFE 4

...*

Q.E.D.

* “ ... ” Q.E.D. Q.E.F.

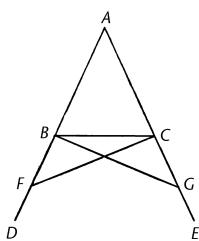
1

2 “ ” ” SAS

4

4

•	4				
•		B E			
•			4 1 2 4		
•				4 8	
•					

3.5

ABC AB AC BD,CE AB,AC 2

ABC ACB CBD BCE

BD F AE AG AF; I.3 FC,GB

AF AG AB AC FA,AC GA,AB FAG

FC GB AFC AGB ACF ABG AFC AGB I.4

AF AG AB AC BF CG

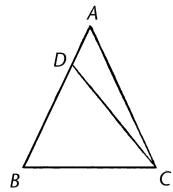
FC GB BF,BC CG,GB BFC CGB BC BFC CGB FBC GCB BCF CBG

ABG ACF CBG BCF ABC ACB ABC

FBC GCB

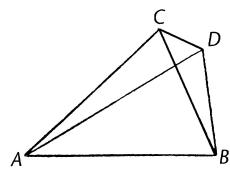
...

Q.E.D.

3.6

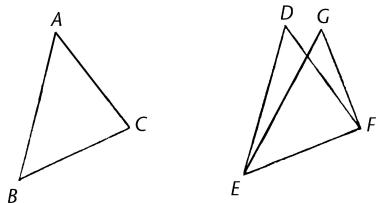
ABC ABC ACB; AB AC
 AB AC
 AB AB DB AC DC
 DB AC BC DB,BC AC,CB DBC ACB DC AB DBC ACB
 AB AC
 ...
 Q.E.D.

- BDC BAC
- “reductio ad absurdum” reduction to absurdity
-
-
-
- 5“ ”
- I.5

3.7

Q.E.D.

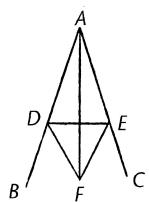
3.8



ABC,DEF AB,AC DE,DF AB DE,AC DF BC EF BAC EDF
 ABC DEF B E BC EF C F BC EF
 BC EF BA,AC ED,DF BC EF BA,AC ED,DF EG,GF
 I.7
 BC EF BA,AC ED,DF BAC EDF

Q.E.D.

- | | | | | |
|---|-----------------------|---|--|-------------|
| <ul style="list-style-type: none"> • I.4 I.8 • • • I.4 | I.4 I.8
i t ** | ? | | SAS SSS |
|---|-----------------------|---|--|-------------|

3.9

BAC

AB D AC AE AD DE DE DEF AF

BAC AF

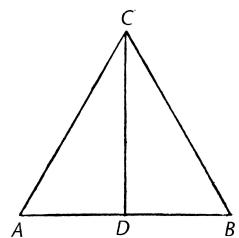
AD AE, AF DA,AF EA,AF

DF EF DAF EAF

BAC AF

Q.E.F.

•
• 17 “ ”
• “ ”

3.10

AB

AB

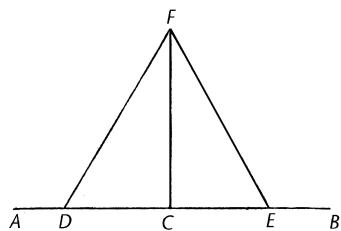
3.11.

31

ABC I.1 ACB CD I.9 AB D
AC CB CD AC,CD BC,CD ACD BCD AD BD I.4
AB D
Q.E.F.

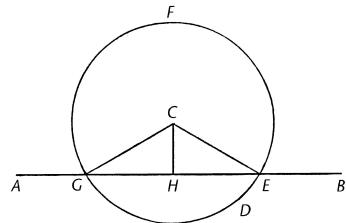
• “ ”
• ”
•

3.11



AB C
C AB
AC D CE CD; I.3 DE FDE I.1 FC FC AB C
DC CE CF DC,CF EC,CF DF FE DCF ECF; I.8
DCF,FCE
AB C CF AB
Q.E.F.

3.12

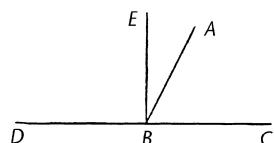


AB C AB C
 AB D C CD EFD 3 H EG I.10 CG,CH,CE 1
 CH AB C
 GH HE, HC GH,HC EH,HC CG CE CHG EHC I.8

10

CH AB C
 Q.E.F.

•

3.13

AB CD CBA,ABD; CBA,ABD
 CBA ABD 10
 B BE CD I.11 CBE,EBD
 CBE CBA,ABE EBD CBE,EBD CBA,ABE,ECD 2
 DBA DBE,EBA ABC DBA,ABC DBE,EBA,ABC 2
 CBE,EBD 1 CBE,EBD DBA,ABC

3.14.

33

CBE,EBD DBA,ABC

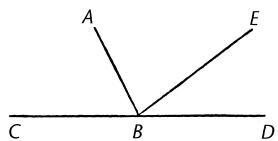
...

Q.E.D.

•

4

3.14



AB B BC,BD ABC,ABD BD CB

BD BC BE CB

AB CBE ABC,ABE I.13

ABC,ABD CBA,ABE CBA,ABD 4 1

CBA ABE ABD 3 BE CB

BD CB

CB BD

...

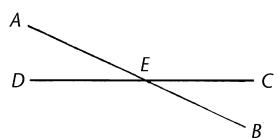
Q.E.D.

•

4

15

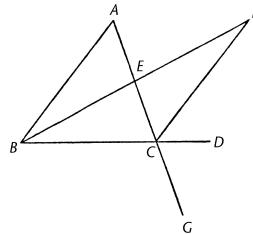
3.15



AB,CD E AEC DEB CEB AED
 AE CD CEA,AED CEA,AED I.13
 DE AB AED,DEB AED,DEB I.13
 CEA,AED CEA,AED AED,DEB. 4 1
 AED CEA BED 3
 CEB,DEA
 ...
 Q.E.D.

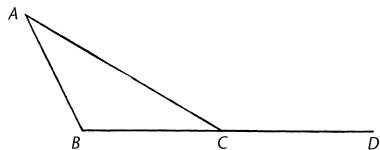
Heath
Proclus 410-485

3.16



ABC BC D ACD CBA BAC
 AC E I.10 BE F EF BE I.3 FC 1 AC G 2
 AE EC BE EF AE,EB CE,EF AEB FEC I.15
 AB FC ABE CFE I.4 BAE ECF
 ECD ECF 5 ACD BAE
 BC BCG ACD I.15 ABC
 ...
 Q.E.D.

- CF ACD
-

3.17

ABC ABC

BC D 2

ACD ABC ABC I.16

ACB ACD,ACB ABC,BCA

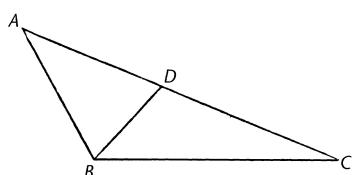
ACD,ACB I.13

ABC,BCA

BAC,ACB CAB,ABC

...

Q.E.D.

3.18

ABC AC AB ABC BCA

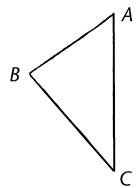
AC AB AD AB I.3 BD

ADB BCD DCB I.16

ADB ABD AB AD ABD ACB ABC ACB

...

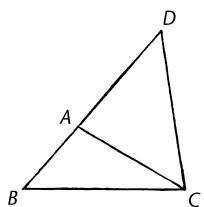
Q.E.D.

3.19

ABC ABC BCA AC AB
 AC AB
 AC AB ABC ACB I.5 AC AB
 AC AB ABC ACB I.5 AC AB

 AC AB
 ...
 Q.E.D.

-
-
- I.18 I.5

3.20

ABC ABC BA,AC BC AB,BC AC BC,CA AB
 BA D DA CA DC
 DA AC ADC ACD I.5 BCD ADC 5

DCB BCD BDC I.19 DB BC

DA AC; BA,AC BC

AB,BC CA BC,CA AB

...

Q.E.D.

“ ” —— remaining side

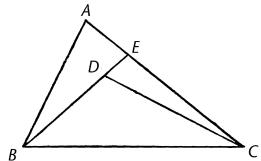
:

- Proclus ,
-

Proclus

M.C.Escher

3.21



ABC BC , B,C BD,DC

BD,DC BA,AC BDC BAC

BD E

I.20 ABE AB,AE BE

EC BA,AC BE,EC

CED CE,ED CD, DB CE,EB CD,DB

BA,AC BD,DC

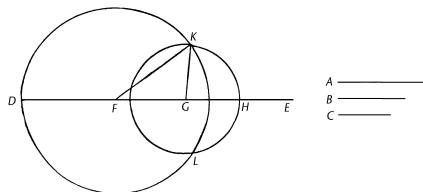
I.16 CDE BDC CED

ABE CEB BAC

BDC CEB BDC BAC

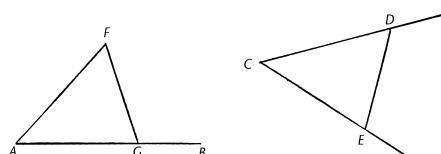
.....

Q.E.D.

3.22

A,B,C A,B C A,C B BC A A,B,C
 DE D E DE A FG B GH C I.3
 F FD DKL G GH KLH KF,KG KFG A,B,C
 F DKL FD FK
 FD A KF A
 G LKH GH GK
 GH C KG C
 FG B KF,FG,GL A,B,C
 KFG A,B,C EF,FG,GK
 Q.E.F.

• 20
•

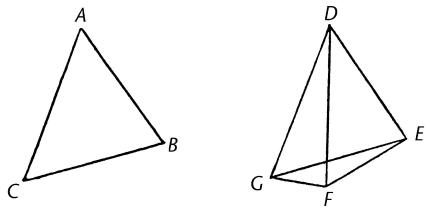
3.23

AB, A DCE AB A DCE
 CD,CE D,E DE CD,DE,CE AFG CD AF, CE AG DE FG I.22

DC,CE FA,AG DE FG DCE FAG I.8
 AB A DCE FAG
 Q.E.F.

- 8-12 **
- I.4
- I.23 I.22 I..22 : I.22 “ ”

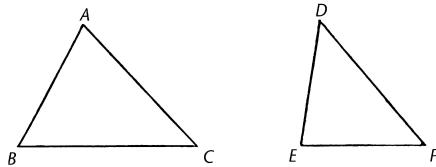
3.24



ABC,DEF AB,AC DE,DF AB DE AC DF A D BC EF
 BAC EDF DE D EDG BAC I.23 DG AC DF EG,FG
 AB DE, AC DG BA,AC ED,DG I.4
 DF DG DGF DFG I.5 DFG EGF
 EFG EGF
 EFG EFG EGF I.19 EG EF
 EG BC BD EF

 Q.E.D.

- 7
- G EF EF 7

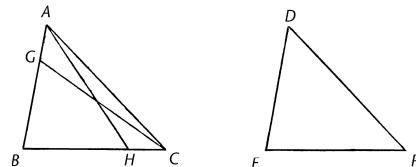
3.25

ABC,DEF AB,AC DE,DF AB DE AC DF BC EF ; BAC EDF

BAC EDF; BC EF I.4 BAC EDF
 BAC EDF BC EF I.24 , BAC EDF
 BAC EDF

.....

Q.E.D.

3.26

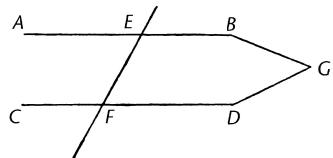
ABC,DEF ABC,BCA DEF,EFD ABC DEF BCA EFD BC EF AB
 AB DE
 AB BG DE GC
 BG DE BC EF GB,BC DE,EF GBC DEF GC DF GBC DEF I.4 GCF
 DFE BCA BCG BCA
 AB DE AB DE
 BC EF AB,BC DE,EF ABC DEF AC EF, BAC EDF I.4
 AB DE AC DF BC EF BAC EDF
 BC EF

BC BH EF AH
 BH EF AB DE AB,BH DE,EF AH DF ABH DEF I.4 BHA EFD
 EFD BCA AHC BHA BCA I.16
 BC EF BC EF
 AB DE AB,BC DE,EF AC DF, ABC DEF BAC EDF I.4

 Q.E.D.

•	1	2
•	I.4	" "
•	I.4	I.16

3.27

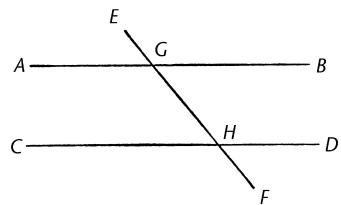


EF AB,CD AEF,EFD AB CD
 AB,CD B,D A,C
 G B,D
 GEF AEF EFG I.16
 AB,CD B,D
 A,C
 23 AB CD

 Q.E.D.

• I.27

- 23 I.27
-
-
-
- I.16 I.16

3.28

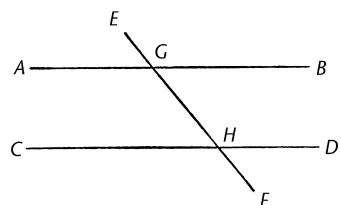
EF	AB,CD	EGB	GHD,	BGH, GHD	AB CD			
EGB	GHD	EGB	AGH I.15	AGH GHD	AB CD I.27			
BGH,GHD		AGH BGH	I.13	AGH,BGH	BGH,GHD	BGH	AGH GHD	AB

.....

Q.E.D.

the exterior angle the exterior angle

- I.28 I.27 I.28

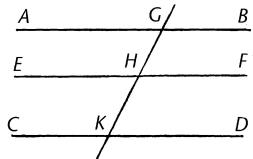
3.29

EF AB,CD AGH,GHD EGB GHD BGH,GHD
 AGH GHD
 AGH
 BGH AGH,BGH I.13 BGH.GHD
 5 ;
 AB,CD AGH GHD
 AGH EGB I.15 EGB GHD 1
 BGH EGB,BGH BGH,GHD 2
 EGB,BGH I.13 BGH,GHD

 Q.E.D.

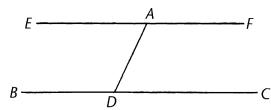
- I.29
- 5 " " I.27 I.28
- 5 **
- 5 29

3.30



AB,CD EF; AB CD
 GK
 GK AB,EF , AGK GHF I.29
 GK EF,CD GHF GKD I.29
 AGK GHF AGK GKD 1 ;
 AB CD
 Q.E.D.
 " ...

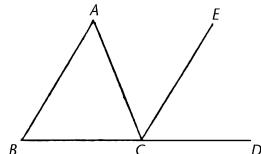
3.31



A	BC	A	BC						
BC	D	AD	DA	A	DAE	ADC	I.23	EA	AF
AF	BC,EF	EAD,ADC	EAF	BC	I.27				
A	EAF	BC							
Q.E.F.									

• I.30 " "

3.32



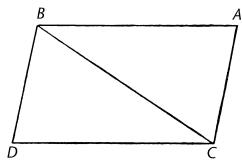
ABC	BC D	ACD	CAB,ABC	ABC,BCA,CAB
C CE	AB			
AB	CE AC	BAC,ACE	I.29	
AB	CE BD	ECD	ABC	I.29
ACE	BAC ACD	BAC,ABC		
ACB	ACD,ACB	ABC,BCA,CAB		
ACD,ACB	I.13 ;	ABC,BCA,CAB		
.....				
Q.E.D.				

3.33.

45

$$\begin{array}{r} \bullet \quad I.17 \\ \bullet \quad I.26 \\ \hline \end{array} \qquad \qquad \qquad \begin{array}{r} 5 \\ I.26 \end{array}$$

3.33



AB,CD [] AC,BD AC,BD

BC

AB CD BC ABC,BCD I.29

AB CD BC AB,BC DC,CB ABC BCD AC BD ABC DCB I.4 ACB CBD
AC,BD BC AC BD I.27

.....

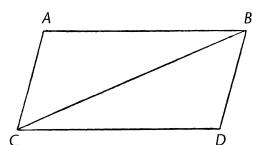
Q.E.D.

• “ ”

22

22

3.34



ACDB BC ACDB BC

AB CD BC ABC,BCD I.29

AC BD BC ACB,CBD I.29

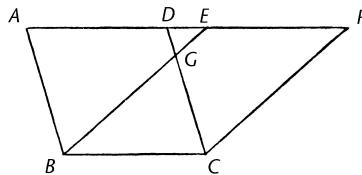
ABC,DCB ABC,BCA DCB,CBD
 ABC BCD CBD ACB ABD ACD 2
 BAC CDB

BC I.26 ; AB CD AC BD BAC CD

AB CD BC AB,BC DC,CB ABC BCD AC DB ABC DCB I.4
 BC ACDB
 "diameter"

•	I.4			
•		I.4	I.8	I.26
•			I.9	
•	" "	area (.....)	5	
•				34

3.35



ABCD,EBCF BC AF,BC ABCD EBCF

ABCD AD BC I.34

EF BC AD EF 1 DE AE DF 2

AB DC I.34 EA,AB FD,DC FDC EAB I.29 EB FC EAB FDC I.4

DGE ABGD EGCF 3

GBC ABCD EBCF

.....

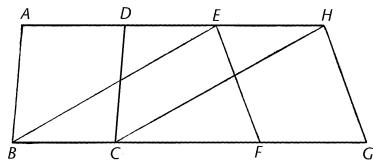
Q.E.D.

• 4 “ ” 4
 •
 • I.35
 • I.4
 • EF
 •
 • EF AD
 •
 •

** 1 "trapezium" 22 "trapezia"

** 2 "triangle ...is equal to triangle ...", "trapezium ...is equal to trapezium ..."

3.36



ABCD, EFGH BC, FG BC,FG ABCD EFGH

BE,CH

BC FG FG EH BC EH 1

EB,HC I.33

EBCH I.34

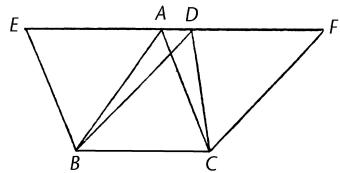
ABCD BC BC,AH I.35

EFGH EBCH I.35 ABCD EFGH 1

.....

Q.E.D.

•

3.37

ABC,DBC BC AD,BC ABC DBC

AD E,F B BE CA I.31 C CF BD I.31

EBCA,DBCF BC BC,EF I.35

ABC EBCA AB I.34

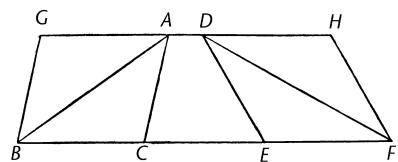
DBC DBCF DC I.34

ABC DBC

.....

Q.E.D.

•
•
•

3.38

ABC,DEF BC,EF BF,AD ABC DEF

AD E,F B BG CA I.31 F FH DE

3.39.

49

GBCA,DEFH GBCA DEFH BC,EF BE,GH I.36

ABC GBCA AB I.34

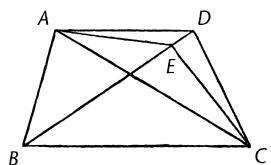
FED DEFH DF I.34

ABC DEF

.....

Q.E.D.

3.39



ABC,DBC BC

AD AD BC

A AE BC I.31 EC ABC EBC BC I.37

ABC DBC DBC EBC 1

AE BC

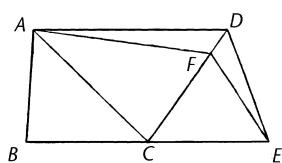
AD AD BC

.....

Q.E.D.

3.40

*



ABC,CDE BC,CE

AD AD BE

A AF BE I.31 , FE

ABC FCE BC,CE BE,AF I.38

ABC DCE DCE FCE 1 AF BE

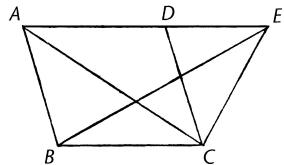
AD AD BE

.....

Q.E.D.

** I.40 Health “Heiberg ... ”

3.41



ABCD EBC BC BC,AE

ABCD BEC

AC

ABC EBC BC BC,AE I.37

ABCD ABC AC I.34 ABCD EBC

.....

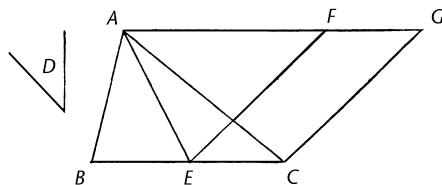
Q.E.D.

•

()

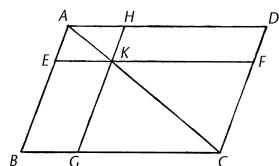
I.34

I.45

3.42

ABC D D ABC
 BCE AE EC E D CEF I.23 A AG EC, C CG EF I.31
 FECG
 BE EC ABE AEC BE,EC BC,AG I.38 ABC AEC
 FECG AEC FECG ABC
 CEF D
 FECG ABC D CEF
 Q.E.F.

• D

3.43

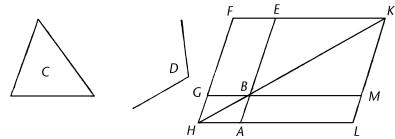
ABCD AC AC EH,FG CK,KD BK KD
 ABCD AC ABC ACD I.34
 EH AK AEK AHK
 KFC KGC
 AEK AHK, KFC KGC AEK KGC AHK KFC 2

ABC ADC BK KD

.....

Q.E.D.

K " BK

3.44

AB C D AB D C

D EBG BEFG C I.42 BE AB FG H A AH BG EF I.31

HB

HF AH,EF AHF,HFE I.29

BHG,GFE 5 HB,FE

K K KL EA FH I.31 HA,GB L,M

HLKF HK AG,ME LB,BF HK LB BF I.43

BF C LB C 1

GBE ABM I.15 GBE D ABM D

C LB AB ABM D

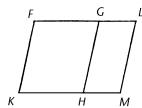
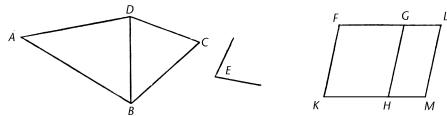
Q.E.F.

- of areas

- 5 5

Proclus " applications

3.45



ABCD E E ABCD

DB FH ABD HKF E I.42 DBC GM GH GHM E I.44

E HKF GHM HKF GHN 1

KHG FKH,KHG KHG,GHM

FKH,KHG I.29 KHG, GHM

GH H KH,HM KH HM I.14

HG KM,FG MHG, HGF I.29

HGL MHG,HGL HGF,HGL 2

MHG,HGL HGF,HGL 1

FG GL I.14

FK HG I.34 HG NL KF ML 1; I 30 KM,FL [] KM,FL I.33 KFLM

ABD FH DBC GM ABCD KFLM

KFLM ABCD FKM E

Q.E.F.

- 44 " "

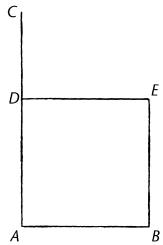
- KH HM FG GL

-

-

-

3.46



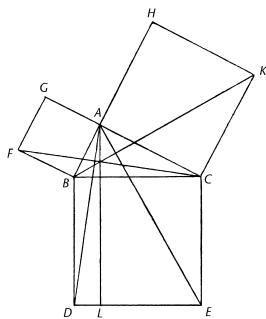
AB AB
 AB A AC I.11 AD AB D DE AB, B BE AD I.31
 ADEB AB DE, AD BE I.34
 AB AD BA,AD,DE,EB ADEB

AD AB,DE BAD,ADE I.29
 BAD ADE
 I.34 ABE,BED
 ADEB

AB
 Q.E.F.

•
 •
 • Q.E.F. " " Q.E.F.
 " "

3.47



ABC BAC BC BA,AC
 BC BDEC BA,AC GB,HC I.46 ; A AL BD CE AD,FC BAC,BAG BA A AC,A
 BA AH
 DBC FBA ABC DBA FBC 2

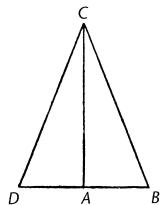
DB BC FB BA AB,BD FB,BC ABD FBC AD FC ABD FBC I.4
 BL ABD BD BD,AL I.41
 GB FBC FB FB,GC I.41

BL GB
 AE,BK CL HC BDEC GB,HC 2
 BDEC BC GB,HC BA,AC
 BC BA,AC

 Q.E.D.

-
- I.47
- Pythagoras

3.48



ABC BC BA,AC BAC
 AC A AD AD BA DC
 DA AB DA AB
 AC DA,AC BA,AC
 DC DA,AC DAC I.47 BC BA,AC DC BC DC BC
 DA AB AC DA,AC BA,AC DC BC DAC BAC I.8
 DAC BAC

Q.E.D.

- I.47
 -
-

12

- Euclid's Elements: All Thirteen Books Complete in One Volume
- The Bones: A handy, where-to-find-it pocket reference companion to Euclid's Elements

/ /

• A

- Adjacent (ejfexh‘ = in order), I. Def. 10 (p. 4)
- Alternate (ejnallavx), of angles, I. 27 (p. 50)
- Angle
 - * rectilineal, I. Def. 9 (p. 3)
 - * adjacent, I. Def. 10 (p. 4)
 - * alternate, I. 27 (p. 50)
 - * exterior and interior (to a figure), I. 16 (p. 34)
 - * interior and opposite, I. 16 (p. 34)
 - * vertical, I. 15 (p. 33)
- Area (cwrivon), pp. 59-60

• B

- Base
 - * of triangle, I. 4 (p. 16)
- Boundary (o{ro~), I. Defs. 13, 14 (p. 4)

• C

- Circle, definition, I. Def. 15 (p. 5)
 - * circle (kuvklo~) and circumference (perifevreia) bisected by diameter, I. Def. 17 (p. 5)
- Compass and Straightedge, p. 10
- Complement, paraphvroma, “(figure) put in to fill up,” I. 43 (p. 71)
- Conclusion, sumpevrasma, necessary part of a proposition, pp. xi, xii

- Construction, *kataskeuh*, one of the formal divisions of a proposition, pp. xi, xii
- D
 - Definition, in sense of “closer statement” (*diorismov~*), one of the formal divisions of a proposition, p. xi
 - Diameter (*diavmetro~*), of circle or parallelogram, I. Def. 17 (p. 5)
 - Distance (*diavsthma*), in the sense of “radius,” I. Post. 3 (p. 7)
 - Divided Line, see Plato
 - Drawing, see Compass and Straightedge
- E
 - Elements, definition, p. xi
 - Enunciation (*provtasi”*), one of the formal divisions of a proposition, pp. xi, xii
 - Equality, in sense different from that of congruence, I. 35 (p. 61).
 - Equilateral triangle, defined, I. Def. 20 (p. 6) constructed, I. 1 (p. 13)
 - Euclid, about, p. ix
 - Exterior and interior (of angles), I. 16 (p. 34)
 - Extremity, *pevra~*, I. Defs. 3, 13 (pp. 3, 4)
- F
 - Figure (*sch‘ma*), I. Def. 14, (p. 4)
- G
 - Guidance for Study of the Propositions, pp. 11–12
- I
 - Isosceles (*ijsoskelhv”*) triangle, defined, I. Def. 20 (p. 6)
- L
 - Line, straight (*eujqei‘a*), I. Def. 4 (p. 3)
- O
 - Oblong, defined, I. Def. 22 (p. 6)
- P
 - Parallelogram, parallelogrammic area
 - * investigated, I. 33 (p. 58)
 - * first referred to by name, I. 34 (p. 59)
 - Parallel Postulate, see Postulate 5
 - Perpendicular (*kavqeto”*), definition, I. Def. 10 (p. 4)

- Plane (or plane surface), defined, I. Def. 7 (p. 3)
- Plato's Divided Line, pp. xii–xiii
- Point, defined, I. Def. 1 (p. 2)
 - * extremity of a line, I. Def. 3 (p. 3)
- Porism, p. xii
- Postulate 5, first use, I. 29 (p. 53)
- Proof (ajpovdeici"), necessary part of proposition, p. xi
- Proportion, pp. i, xiii
- Q
 - Q.E.D. (or Q.E.F.), pp. xii–xiii, 16
- R
 - Rectilineal angle, I. Def. 9 (p. 3)
 - * rectilineal figure, I. Def. 19 (p. 5)
 - Reductio ad absurdum, pp. 21, 23, 37, 51, 65
 - Right angle, definition, I. Def. 10 (p. 4)
- S
 - Scalene (skalhnov" or skalhnhv") triangle, I. Def. 20 (p. 6)
 - Semicircle, I. Def. 18 (p. 5)
 - * centre of, I. Def. 18 (p. 5)
 - Setting-out (e[kqesi"], one of the formal divisions of a proposition, pp. xi, xii
 - Square, defined, I. Def. 22 (p. 6)
 - Straight line, definition, I. Def. 4 (p. 3)
 - Straightedge, see Compass
 - Surface (ejpifavneia), I. Def. 5 (p. 3)
 - * plane surface, see Plane
- T
 - "Therefore, etc." explained, p. xi
 - Triangle (trivgwnon)
 - * several species defined, I. Defs. 20, 21 (p. 6)
 - * sum of interior angles in, I. 32 (p. 57)
- V
 - Vertical angles, I. 15 (p. 33)
- - bisect
 - demonstration proof
 - theorem
 - transverse line
 - cong...

Dana Densmore

Dana Densmore

Densmore