

## SUMMARY OF CONTENTS

<b>INTRODUCTION . . . . .</b>		<b>I</b>
Aristotle's view of mathematics in relation to the sciences . . . . .		I
(a) General . . . . .		I
(b) Physics and mathematics . . . . .		9
(c) Mathematics and applied mathematics . . . . .		11
(d) Astronomy and physics . . . . .		12
 <b>II. CATEGORIES . . . . .</b>		<b>17</b>
(a) Squaring of the circle . . . . .		17
<i>Cat.</i> 7. 7 <sup>b</sup> 27-33. Knowable prior to known. <i>Squaring of circle</i> not yet discovered. Eclipse prior to knowledge of cause (Thales).		
(b) Figure . . . . .		19
<i>Cat.</i> 8. 10 <sup>a</sup> 11-23. Figure as quality (triangle, square, straight line, curved, etc.); but figures do not admit of more and less.		
(c) Gnomon . . . . .		20
<i>Cat.</i> 14. 15 <sup>a</sup> 29-32. History of gnomon.		
 <b>III. PRIOR ANALYTICS . . . . .</b>		<b>22</b>
(a) Incommensurability of the diagonal . . . . .		22
<i>An. Pr.</i> I. 23. 41 <sup>a</sup> 23-7. <i>An. Post.</i> I. 33. 89 <sup>a</sup> 29-30.		
(b) Euclid I. 5—Aristotle's proof . . . . .		23
<i>An. Pr.</i> I. 24. 41 <sup>b</sup> 13-22.		
(c) Observational astronomy— <i>phaenomena</i> . . . . .		25
<i>An. Pr.</i> I. 30. 46 <sup>a</sup> 17-21.		
(d) Syllogism: forms of terms. The sum of the angles of a triangle is equal to two right angles . . . . .		25
<i>An. Pr.</i> I. 35. 48 <sup>a</sup> 29-39.		
(e) The geometer's hypotheses . . . . .		26
<i>An. Pr.</i> I. 41. 49 <sup>b</sup> 33-7, 50 <sup>a</sup> 1-4. <i>An. Post.</i> I. 10. 76 <sup>b</sup> 39-77 <sup>a</sup> 3.		
(f) Parallel straight lines: <i>petilio principii</i> . . . . .		27
<i>An. Pr.</i> II. 16. 65 <sup>a</sup> 4-9.		
(g) Incommensurability of diagonal and Zeno's bisection. Chrystal's proof . . . . .		30
<i>An. Pr.</i> II. 17. 65 <sup>b</sup> 16-21.		
(h) The squaring of the circle by means of lunes . . . . .		33
<i>An. Pr.</i> II. 25. 69 <sup>a</sup> 20-4, 30-4.		

<b>IV. POSTERIOR ANALYTICS</b>	37
(a) General . . . . .	37
<i>An. Post.</i> I. 1. 71 <sup>a</sup> 1-9, 11-21.	
(b) Essential attributes: primary and universal . . . . .	39
<i>An. Post.</i> I. 4. 73 <sup>a</sup> 28-b5; 5. 74 <sup>a</sup> 4-16.	
(c) Proposition about parallels . . . . .	41
<i>An. Post.</i> I. 5. 74 <sup>a</sup> 16-b4.	
(d) General: you cannot prove a thing from one genus to another . . . . .	44
<i>An. Post.</i> I. 6-7. 75 <sup>a</sup> 35-b17.	
(e) Bryson and the squaring of the circle . . . . .	47
<i>An. Post.</i> I. 9. 75 <sup>b</sup> 37-76 <sup>a</sup> 3.	
<i>Soph. El.</i> 11. 171 <sup>b</sup> 12-18, 34-172 <sup>a</sup> 7.	
(f) First principles of mathematics . . . . .	50
<i>An. Post.</i> I. 10. 76 <sup>a</sup> 31-77 <sup>a</sup> 4.	
<i>An. Post.</i> I. 2. 72 <sup>a</sup> 14-24.	
(g) 'Ungeometrical' questions . . . . .	57
<i>An. Post.</i> I. 12. 77 <sup>b</sup> 16-33.	
(h) 'Applied' mathematics . . . . .	58
<i>An. Post.</i> I. 13. 78 <sup>b</sup> 32-79 <sup>a</sup> 13.	
(i) Universal proof versus 'particular' . . . . .	61
<i>An. Post.</i> I. 23. 84 <sup>b</sup> 6-9; 24. 85 <sup>a</sup> 20-31, b <sub>4</sub> -15; 86 <sup>a</sup> 22-30.	
(j) Exterior angles of rectilinear figures . . . . .	62
<i>An. Post.</i> I. 24. 85 <sup>b</sup> 37-86 <sup>a</sup> 3.	
(k) 'Exactness', priority. τὰ ἐξ ἀφαιρέσεως, τὰ ἐκ προσθέσεως . . . . .	64
<i>An. Post.</i> I. 27. 87 <sup>a</sup> 31-7.	
<i>Metaph.</i> K. 3. 106 <sup>a</sup> 28-b3.	
<i>Phys.</i> II. 2. 193 <sup>b</sup> 31-5, 194 <sup>a</sup> 1-7.	
<i>De an.</i> III. 7. 43 <sup>b</sup> 12-16.	
(l) No knowledge through sense alone . . . . .	67
<i>An. Post.</i> I. 31. 87 <sup>b</sup> 35-88 <sup>a</sup> 5, 88 <sup>a</sup> 11-17; II. 2. 90 <sup>a</sup> 24-30.	
(m) Definition and demonstration . . . . .	68
<i>An. Post.</i> II. 3. 90 <sup>a</sup> 36-b17, 90 <sup>b</sup> 28-91 <sup>a</sup> 6; 7. 92 <sup>b</sup> 12-25.	
(n) Angle in a semicircle . . . . .	71
<i>An. Post.</i> II. 11. 94 <sup>a</sup> 24-35.	
<i>Metaph.</i> Θ. 9. 105 <sup>a</sup> 27-9.	
(o) <i>Alternando</i> in proportion . . . . .	74
<i>An. Post.</i> II. 17. 99 <sup>a</sup> 1-23.	
<b>V. TOPICS</b> . . . . .	76
(a) <i>Pseudographemata</i> . . . . .	76
<i>Topics</i> I. 101 <sup>a</sup> 5-17.	
(b) 'Indivisible lines' . . . . .	78
<i>Topics</i> IV. 1. 121 <sup>b</sup> 15-23.	

SUMMARY OF CONTENTS	ix
(c) Definition of 'same ratio' . . . . .	80
<i>Topics VIII. 3. 158<sup>b</sup>29-159<sup>a</sup>1.</i>	
(d) Definitions . . . . .	83
<i>An. Post. II. 13. 96<sup>a</sup>24-b<sub>1</sub>.</i>	
<i>Topics VI. 4. 141<sup>a</sup>24-142<sup>a</sup>9.</i>	
(e) Definitions: failure to define by prior terms and need to specify genus . . . . .	86
<i>Topics VI. 4. 142<sup>a</sup>22-b<sub>19</sub>; 5. 142<sup>b</sup>22-9.</i>	
(f) Definition of 'line' . . . . .	88
<i>Topics VI. 6. 143<sup>b</sup>11-144<sup>a</sup>4; 12. 149<sup>a</sup>29-36.</i>	
(g) Definition of 'straight line' . . . . .	92
<i>Topics VI. 11. 148<sup>b</sup>23-32.</i>	
(h) Utility of arguments: multiplication table . . . . .	93
<i>Topics VIII. 14. 163<sup>b</sup>17-28.</i>	
 VI. PHYSICS . . . . .	 94
(a) Quadrature of the circle: Hippocrates, Bryson . . . . .	94
<i>Soph. El. 11. 171<sup>b</sup>12-18, 34-172<sup>a</sup>7.</i>	
<i>Phys. I. 2. 185<sup>a</sup>14-17.</i>	
(b) Things known to us and things prior in the order of nature. Definition of circle . . . . .	97
<i>Phys. I. 1. 184<sup>a</sup>10-b<sub>12</sub>.</i>	
(c) Mathematics and physics . . . . .	98
<i>Phys. II. 2. 193<sup>b</sup>22-194<sup>a</sup>15.</i>	
(d) Necessity in mathematics . . . . .	100
<i>Phys. II. 9. 200<sup>a</sup>15-19.</i>	
(e) The gnomons . . . . .	101
<i>Phys. III. 4. 203<sup>a</sup>10-15.</i>	
(f) Infinity . . . . .	102
<i>Phys. III. 4. 203<sup>b</sup>15-30, 204<sup>a</sup>2-7; 5. 204<sup>a</sup>34-b<sub>4</sub>; 6. 206<sup>a</sup>9-b<sub>27</sub>, 206<sup>b</sup>33-207<sup>a</sup>2; 7. 207<sup>a</sup>33-b<sub>34</sub>; 8. 208<sup>a</sup>14-22.</i>	
(g) Place . . . . .	113
<i>Phys. IV. 1. 208<sup>a</sup>27-209<sup>a</sup>30.</i>	
(h) Void and motion . . . . .	115
<i>Phys. IV. 8. 215<sup>a</sup>14-22, a<sup>a</sup>24-b<sub>10</sub>, b<sub>13</sub>-22, b<sub>22</sub>-216<sup>a</sup>11, 216<sup>a</sup>11-21.</i>	
(i) The 'now' in time and the point in space . . . . .	120
<i>Phys. IV. 10. 218<sup>a</sup>6-8; 11. 219<sup>b</sup>11-15, 220<sup>a</sup>4-13, 18-21.</i>	
(j) Some definitions: 'together', 'in contact', 'successive', 'contiguous', 'continuous' . . . . .	121
<i>Phys. V. 3. 226<sup>b</sup>21-2, b<sub>23</sub>, b<sub>34</sub>-227<sup>a</sup>7, 227<sup>a</sup>10-32; 4. 228<sup>b</sup>1-6, b<sub>15</sub>-25.</i>	
(k) Motion divisible <i>ad infinitum</i> . . . . .	124
<i>Phys. VI. 1. 231<sup>a</sup>21-232<sup>a</sup>22; 2. 232<sup>a</sup>23-b<sub>20</sub>, 233<sup>a</sup>13-31.</i>	

## SUMMARY OF CONTENTS

(l) Zeno's arguments against motion . . . . .	133
<i>Phys.</i> VI. 8. 239 <sup>a</sup> 27– <sup>b</sup> 4; 9. 239 <sup>b</sup> 5–9, 9–33, 33–240 <sup>a</sup> 18.	
(m) Motion on a circle and on a straight line . . . . .	140
<i>Phys.</i> VII. 4. 248 <sup>a</sup> 10–13, 18– <sup>b</sup> 7, <sup>b</sup> 10–12, 249 <sup>a</sup> 8–13, 13–17.	
(n) Motion caused by different forces . . . . .	142
<i>Phys.</i> VII. 5. 249 <sup>b</sup> 27–250 <sup>a</sup> 28.	
(o) Circular motion and rectilinear motion; Zeno's dichotomy . . . . .	146
<i>Phys.</i> VIII. 8. 261 <sup>b</sup> 27–262 <sup>a</sup> 5, 262 <sup>a</sup> 12– <sup>b</sup> 4, 262 <sup>b</sup> 21–263 <sup>a</sup> 1.	
(p) Zeno's 'Dichotomy' (further) . . . . .	149
<i>Phys.</i> VIII. 8. 263 <sup>a</sup> 4– <sup>b</sup> 9.	
(q) Circular motion ( $\kappa\kappa\lambda\varphi$ ) may be one and continuous . . . . .	150
<i>Phys.</i> VIII. 8. 264 <sup>b</sup> 9–28.	
(r) A finite movent cannot cause motion for an infinite time . . . . .	151
<i>Phys.</i> VIII. 10. 266 <sup>a</sup> 12–23, <sup>a</sup> 24– <sup>b</sup> 6, <sup>b</sup> 6–24.	
(s) Motion of things thrown . . . . .	155
<i>Phys.</i> VIII. 10. 266 <sup>b</sup> 27–267 <sup>a</sup> 20.	
 VII. DE CAELO . . . . .	159
(a) Bodies, dimensions, etc. . . . .	159
<i>De caelo</i> I. 1. 268 <sup>a</sup> 1–13.	
(b) 'Heavy' and 'light' . . . . .	160
<i>De caelo</i> I. 3. 269 <sup>b</sup> 20–32.	
(c) Agelessness of the universe . . . . .	160
<i>De caelo</i> I. 3. 270 <sup>b</sup> 1–20.	
(d) Two simple motions, circular and rectilinear . . . . .	161
<i>De caelo</i> I. 3. 270 <sup>b</sup> 26–31.	
(e) Is the universe finite or infinite? Is there an infinite body? . . . . .	162
<i>De caelo</i> I. 5 and, in particular, I. 5. 271 <sup>b</sup> 2–11.	
(f) A circularly moving body must be finite . . . . .	163
<i>De caelo</i> I. 5. 271 <sup>b</sup> 26–272 <sup>a</sup> 20, 272 <sup>b</sup> 25–8.	
(g) Bodies and weight . . . . .	164
<i>De caelo</i> I. 6. 273 <sup>a</sup> 21–7, etc.; I. 7.	
(h) Falling bodies, etc. . . . .	167
<i>De caelo</i> I. 8. 277 <sup>a</sup> 27– <sup>b</sup> 8.	
(i) Mathematical 'impossibility' . . . . .	168
<i>De caelo</i> I. 11. 281 <sup>a</sup> 4–7; 12. 281 <sup>b</sup> 3–7.	
(j) Priority of circle and sphere among figures . . . . .	169
<i>De caelo</i> II. 4. 286 <sup>b</sup> 27–33.	
(k) A revolving heaven must be spherical . . . . .	170
<i>De caelo</i> II. 4. 287 <sup>a</sup> 11–22.	
(l) Shortest line returning on itself . . . . .	171
<i>De caelo</i> II. 4. 287 <sup>a</sup> 27–8.	

SUMMARY OF CONTENTS	xi
(m) Surface of water at rest is spherical . . . . .	172
<i>De caelo</i> II. 4. 287 <sup>b</sup> <sub>4-14</sub> .	
(n) Construction of bodies out of planes . . . . .	174
<i>De caelo</i> III. 1. 299 <sup>a</sup> <sub>2-11</sub> ; b <sub>23-31</sub> ; 4. 303 <sup>a</sup> <sub>31-b1</sub> ; 5. 304 <sup>b</sup> <sub>2-4</sub> , 305 <sup>b</sup> <sub>28-306<sup>a</sup>5</sub> , 306 <sup>a</sup> <sub>20-3</sub> , 7-8, 306 <sup>a</sup> <sub>23-b8</sub> .	
(o) Principles should be the fewest possible . . . . .	178
<i>De caelo</i> III. 4. 302 <sup>b</sup> <sub>26-30</sub> .	
(p) Motion of falling and rising bodies . . . . .	178
<i>De caelo</i> III. 5. 304 <sup>b</sup> <sub>17-18</sub> ; IV. 1. 308 <sup>a</sup> <sub>29-33</sub> ; 2. 309 <sup>b</sup> <sub>12-15</sub> ; 4. 311 <sup>b</sup> <sub>1-13</sub> , 311 <sup>b</sup> <sub>33-312<sup>a</sup>1</sub> .	
VIII. METEOROLOGY . . . . .	180
(a) A geometrical proposition . . . . .	180
<i>Meteor.</i> III. 3. 373 <sup>a</sup> <sub>3-19</sub> .	
(b) A locus-proposition . . . . .	181
<i>Meteor.</i> III. 5 and, in particular, 375 <sup>b</sup> <sub>16-376<sup>b</sup>12</sub> , 376 <sup>b</sup> <sub>12-22</sub> , b <sub>28-377<sup>a</sup>11</sub> .	
IX. DE ANIMA . . . . .	191
(a) A straight line touching a (brazen) sphere . . . . .	191
<i>De an.</i> I. 1. 403 <sup>a</sup> <sub>12-16</sub> .	
(b) Definition of 'squaring' . . . . .	191
<i>De an.</i> II. 2. 413 <sup>a</sup> <sub>13-20</sub> . <i>Metaph.</i> B. 2. 996 <sup>b</sup> <sub>18-22</sub> .	
(c) 'Point', 'division', as 'privation' . . . . .	193
<i>De an.</i> III. 6. 430 <sup>b</sup> <sub>20-1</sub> .	
(d) The abstractions of mathematics . . . . .	194
<i>De an.</i> III. 7. 431 <sup>b</sup> <sub>12-16</sub> .	
X. METAPHYSICS . . . . .	195
(a) History of mathematics . . . . .	195
<i>Metaph.</i> A. 1. 981 <sup>b</sup> <sub>20-5</sub> .	
(b) Incommensurability of the diagonal . . . . .	196
<i>Metaph.</i> A. 2. 983 <sup>a</sup> <sub>13-20</sub> .	
(c) Pythagoreans and mathematics . . . . .	197
<i>Metaph.</i> A. 5. 985 <sup>b</sup> <sub>23-986<sup>a</sup>3</sub> ; N. 3. 1090 <sup>a</sup> <sub>20-5</sub> .	
(d) Plato on 'points' and indivisible lines . . . . .	199
<i>Metaph.</i> A. 9. 992 <sup>a</sup> <sub>10-24</sub> ; a. 2. 994 <sup>b</sup> <sub>22-5</sub> .	
(e) Beauty in mathematics . . . . .	201
<i>Metaph.</i> B. 2. 996 <sup>a</sup> <sub>29-b1</sub> .	
(f) Axioms . . . . .	201
<i>Metaph.</i> B. 2. 996 <sup>b</sup> <sub>26-33</sub> , 997 <sup>a</sup> <sub>10-11</sub> , 19-21; Γ. 3. 1005 <sup>a</sup> <sub>19-27</sub> ; K. 4. 1061 <sup>b</sup> <sub>17-25</sub> ; Γ. 3. 1005 <sup>b</sup> <sub>11-20</sub> ; 4. 1006 <sup>a</sup> <sub>5-15</sub> .	
(g) Geometry and geodesia . . . . .	203
<i>Metaph.</i> B. 2. 997 <sup>b</sup> <sub>26-34</sub> .	

## SUMMARY OF CONTENTS

(h) Protagoras and contact with a circle <i>Metaph.</i> B. 2. 997 <sup>b</sup> 35–998 <sup>a</sup> 4.	. . . . .	204
(i) Elements . . . . . <i>Metaph.</i> B. 3. 998 <sup>a</sup> 25–7; 4. 3. 1014 <sup>a</sup> 31– <sup>b</sup> 3.	. . . . .	205
(j) Senses of 'one' . . . . . <i>Metaph.</i> A. 6. 1016 <sup>b</sup> 11–13, 16–17.	. . . . .	206
(k) Dimensions . . . . . <i>Metaph.</i> A. 6. 1016 <sup>b</sup> 23–31.	. . . . .	206
(l) δύναμις, etc., in geometry . . . . . <i>Metaph.</i> A. 12. 1019 <sup>b</sup> 33–4.	. . . . .	207
(m) Mathematica as 'quality' . . . . . <i>Metaph.</i> A. 14. 1020 <sup>a</sup> 35– <sup>b</sup> 8.	. . . . .	208
(n) 'Relative' as applied to numbers . . . . . <i>Metaph.</i> A. 15. 1020 <sup>b</sup> 26–1021 <sup>a</sup> 7.	. . . . .	209
(o) Physics and mathematics . . . . . <i>Metaph.</i> E. 1. 1025 <sup>b</sup> 18–1026 <sup>a</sup> 5, 1026 <sup>a</sup> 6–19.	. . . . .	211
(p) 'Figure' (form and matter): 'bronze sphere' <i>Metaph.</i> Z. 7, 8; 4. 10. 1035 <sup>b</sup> 33–1036 <sup>a</sup> 12.	. . . . .	213
(q) Definition of a whole in relation to definition of its parts . . . . . <i>Metaph.</i> Z. 10. 1034 <sup>b</sup> 20–4.	. . . . .	214
(r) Angle in a semicircle, etc. <i>Metaph.</i> Θ. 9. 1051 <sup>a</sup> 21–31.	. . . . .	216
(s) Measures . . . . . <i>Metaph.</i> I. 1. 1052 <sup>b</sup> 20–7, 31–1053 <sup>a</sup> 18.	. . . . .	217
(t) The geometer's hypotheses . . . . . <i>Metaph.</i> N. 2. 1089 <sup>a</sup> 21–5.	. . . . .	219
(u) Numbers: Pythagorean and Platonist views . . . . . <i>Metaph.</i> N. 3. 1090 <sup>a</sup> 20–5; 5. 1092 <sup>b</sup> 8–23; 6. 1092 <sup>b</sup> 26–32.	. . . . .	220
(v) 'Universal' mathematics . . . . . <i>Metaph.</i> E. 1. 1026 <sup>a</sup> 23–7; K. 7. 1064 <sup>b</sup> 8–9; M. 2. 1077 <sup>a</sup> 9–10; 1077 <sup>b</sup> 17–22.	. . . . .	222
(w) Objects of mathematics, physics, and first philosophy . . . . . <i>Metaph.</i> K. 1. 1059 <sup>b</sup> 9–20; 2. 1060 <sup>b</sup> 12–17; 7. 1064 <sup>a</sup> 30– <sup>b</sup> 3; M. 1–3; 3. 1078 <sup>a</sup> 2–31.	. . . . .	224
 XI. MECHANICS . . . . .	. . . . .	227
(a) Mechanics . . . . . <i>Mech.</i> 3. 850 <sup>a</sup> 39– <sup>b</sup> 6; 3. 848 <sup>a</sup> 11–19.	. . . . .	227
(b) Motion in a circle: supposed two motions . . . . . <i>Mech.</i> 2. 848 <sup>b</sup> 1–10, <sup>b</sup> 13–26, <sup>b</sup> 26–35, <sup>b</sup> 35–849 <sup>a</sup> 1, 849 <sup>a</sup> 2–38; <sup>a</sup> 38– <sup>b</sup> 19, <sup>b</sup> 19–34, 850 <sup>a</sup> 3–29.	. . . . .	229
(c) The lever . . . . . <i>Mech.</i> 3. 850 <sup>a</sup> 30– <sup>b</sup> 9, <sup>b</sup> 10–27.	. . . . .	235

	SUMMARY OF CONTENTS	xiii
(d) The rudder and the mast . . . . . Mech. 5. 850 <sup>b</sup> 28-851 <sup>b</sup> 5	238	
(e) Motion of a circle . . . . . Mech. 8. 851 <sup>b</sup> 15-40.	239	
(f) The balance . . . . . Mech. 10. 852 <sup>a</sup> 23-8.	240	
(g) Breaking a stick . . . . . Mech. 14. 852 <sup>b</sup> 22-8, 853 <sup>a</sup> 5-18.	240	
(h) The wedge . . . . . Mech. 17. 853 <sup>a</sup> 19-31.	241	
(i) Pulleys . . . . . Mech. 18. 853 <sup>a</sup> 32-b13.	242	
(j) The steelyard . . . . . Mech. 20. 853 <sup>b</sup> 25-854 <sup>a</sup> 15.	244	
(k) Tooth-forceps and nut-crackers . . . . . Mech. 21-2.	245	
(l) The rhombus of velocities . . . . . Mech. 23. 854 <sup>b</sup> 16-855 <sup>a</sup> 27.	245	
(m) The wheel of Aristotle . . . . . Mech. 24. 855 <sup>a</sup> 28-856 <sup>a</sup> 38.	246	
(n) The weight on a pole . . . . . Mech. 29. 857 <sup>b</sup> 9-20.	252	
(o) Rising from a sitting position . . . . . Mech. 30. 857 <sup>b</sup> 21-858 <sup>a</sup> 2.	253	
(p) Inertia . . . . . Mech. 31. 858 <sup>a</sup> 3-12.	254	
<b>XII. TREATISE ON INDIVISIBLE LINES . . . . .</b>	<b>255</b>	
<b>XIII. PROBLEMS: BOOK XV . . . . .</b>	<b>258</b>	
(a) Diameter . . . . . cc. 1, 2. 910 <sup>b</sup> 11-22.	258	
(b) The number ten: decimal system . . . . . c. 3. 910 <sup>b</sup> 23-911 <sup>a</sup> 4.	258	
(c) The sun's rays and length of shadows . . . . . c. 5. 911 <sup>a</sup> 14-b2.	260	
(d) Appearance of the half-moon . . . . . c. 7. 911 <sup>b</sup> 35-912 <sup>a</sup> 4.	262	
<b>XIV. PROBLEMS: BOOK XVI . . . . .</b>	<b>264</b>	
(a) Cylinders and cone rolling . . . . . c. 5. 913 <sup>b</sup> 37-914 <sup>a</sup> 24.	264	
(b) Oblique section of cylinder . . . . . c. 6. 914 <sup>a</sup> 25-39.	265	

## SUMMARY OF CONTENTS

(c) Objects impinging on a surface rebound at equal angles . . . . .	267
c. 4. 913 <sup>b</sup> 6-36; 13. 915 <sup>b</sup> 18-35.	
<b>XV. PROBLEMS: BOOK XXIII</b> . . . . .	269
c. 3. 931 <sup>b</sup> 9-18.	
<b>XVI. NICOMACHEAN AND EUDEMIAN ETHICS</b> . . . . .	270
(a) General . . . . .	270
<i>N.E. I. 1. 1094<sup>b</sup>25-7; II. 9. 1109<sup>a</sup>24-6; III. 3. 1112<sup>a</sup>18-26.</i>	
(b) Mathematical analysis . . . . .	270
<i>N.E. III. 3. 1112<sup>b</sup>11-24.</i>	
(c) Pythagoreans and mathematics: justice and reciprocity . . . . .	272
<i>N.E. V. 3-5. 1131<sup>a</sup>10-1134<sup>a</sup>16.</i>	
(d) Young people of mathematics . . . . .	276
<i>N.E. VI. 8. 1142<sup>a</sup>11-20.</i>	
(e) <i>roots</i> and <i>φόρησις</i> . . . . .	276
<i>N.E. VI. 8. 1142<sup>a</sup>25-9.</i>	
(f) The hypotheses of mathematics . . . . .	278
<i>N.E. VII. 8. 1151<sup>a</sup>16-18.</i>	
(g) The hypotheses and principles of mathematics . . . . .	279
<i>Eudemian Ethics, II. 6. 1222<sup>b</sup>23-41.</i>	
<b>XVII. DE MOTU ANIMALIUM</b> . . . . .	281
<b>XVIII. DE INCESSU ANIMALIUM</b> . . . . .	283
c. 2. 704 <sup>b</sup> 18-22 (dimensions).	
c. 4. 705 <sup>a</sup> 26-8; <sup>a</sup> 28-b8.	
c. 9. 708 <sup>b</sup> 26-709 <sup>a</sup> 4 (on animals walking).	
c. 9. 709 <sup>a</sup> 16-24. . . . .	284
<b>INDEX</b> . . . . .	285