

**MAT 099 – Algebra Essentials Exercises from Textbook
(Updated 5/19/17)**

Course Textbook, *Intermediate Algebra* from OpenStax, ISBN 0998625728 is free and open online.

Chapter 1 Foundations

Sections	Pages	Exercises
1.1	21 - 22	1 – 53 EOO (E very O ther O dd Problem) and 55 – 58 ALL
1.2	37 - 39	59 – 137 EOO and 139 – 142 ALL
1.3	52 - 54	143 – 233 EOO and 235 – 238 ALL
1.4	69 - 70	239 – 307 EOO and 309 – 312 ALL
1.5	81 - 82	313 – 380 EOO and 381 – 384 ALL

Chapter 2 Solving Linear Equations

Sections	Pages	Exercises
2.1	111- 113	1 – 73 EOO and 75 – 80 ALL
2.2	128 - 131	81 – 102 EOO, 117 – 159 EOO and 161 – 164 ALL
2.3	144 - 147	165 – 230 EOO and 235, 236
2.4	OMIT	OMIT
2.5	183 - 186	296 – 345 EOO and 369, 371, 373
2.6	195 - 197	376 – 426 EOO and 430 – 433 ALL
2.7	OMIT	OMIT

Chapter 3 Graphs and Functions

Sections	Pages	Exercises
3.1	250 - 253	1 – 71 ODD
3.2	274 - 278	73 – 154 EOO
3.3	291 - 294	155 – 236 EOO
3.4	310 - 312	237 – 275 and 277 – 282 ALL
3.5	325 - 328	283 – 335 EOO
3.6	343 - 346	337 – 390 EOO

Chapter 4 Systems of Linear Equations

Sections	Pages	Exercises
4.1	OMIT	OMIT
4.2	OMIT	OMIT
4.3	OMIT	OMIT
4.4	OMIT	OMIT
4.5	OMIT	OMIT
4.6	OMIT	OMIT
4.7	OMIT	OMIT

Chapter 5 Polynomials and Polynomial Functions

Sections	Pages	Exercises
5.1	497 - 499	1 – 7 (polynomials in one variable only) ODD and 9 – 79 EOO
5.2	520 - 523	81 – 173 EOO and 174 – 177 ALL
5.3	536 - 539	179 – 283 EOO and 284 – 287 ALL
5.4	551 - 552	289 – 315 ODD and 338, 339

Chapter 6 Factoring

Sections	Pages	Exercises
6.1	572	1 – 35 ODD
6.2	OMIT	OMIT
6.3	OMIT	OMIT
6.4	OMIT	OMIT
6.5	OMIT	OMIT

Chapter 7 Rational Expressions and Functions

Sections	Pages	Exercises
7.1	651	1a, 1b, 2a, 2b, 3a, 3b, 4a, 4b, 5 – 10 ALL, graph $y = \frac{1}{x}$ and state the domain
7.2	OMIT	OMIT
7.3	OMIT	OMIT
7.4	OMIT	OMIT
7.5	OMIT	OMIT
7.6	OMIT	OMIT

Chapter 8 Roots and Radicals

Sections	Pages	Exercises
8.1	755	1 – 17 ODD and 23, 25 and 51 – 54 ALL
8.2	OMIT	OMIT
8.3	786	129 – 139 ODD, 145 – 149 ODD
8.4	OMIT	OMIT
8.5	OMIT	OMIT
8.6	825	343 – 348 ALL
8.7	832 - 833	351 – 357 ODD, graph $y = \sqrt{x}$, and state the domain
8.8	OMIT	OMIT

Chapter 9 Quadratic Equations and Functions

Sections	Pages	Exercises
9.1	OMIT	OMIT
9.2	OMIT	OMIT
9.3	OMIT	OMIT
9.4	OMIT	OMIT
9.5	OMIT	OMIT
9.6	944	229 – 232 ALL, graph $y = x^2$, and state the domain
9.7	OMIT	OMIT
9.8	OMIT	OMIT

Chapter 10 Exponential and Logarithmic Functions

Sections	Pages	Exercises
10.1	OMIT	OMIT
10.2	1018	65 - 76 ODD, graph $y = a^x$, $y = \left(\frac{1}{a}\right)^x$, $y = e^x$ and state the domains
10.3	1035	208 - 211
10.4	OMIT	OMIT
10.5	OMIT	OMIT

Chapter 11 Conics

Sections	Pages	Exercises
11.1	OMIT	OMIT
11.2	OMIT	OMIT
11.3	OMIT	OMIT
11.4	OMIT	OMIT
11.5	OMIT	OMIT

Chapter 12 Sequences, Series and Binomial Theorem

Sections	Pages	Exercises
12.1	OMIT	OMIT
12.2	OMIT	OMIT
12.3	OMIT	OMIT
12.4	OMIT	OMIT