

Correlation list of 2nd and 3rd edition problem numbers
for problems which appear in both editions, to
accompany *Mathematical Methods in the Physical
Sciences*, 3rd edition

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Note: In most chapters just the section number and problem number are given. However, in some chapters 2nd edition problems were in a different chapter, and in that case the complete 2nd edition reference is given, chapter, section, problem number.

Chapter 1		Chapter 1	
3rd edition	2nd edition	3rd edition	2nd edition
1.1–1.6	same	6.5–6.37	same
1.7	1.9	Section 7	same
1.8	1.10	9.1–9.21	same
1.9–1.11	new	9.22	new
1.12–1.13	same	10.1–10.25	same
1.14–1.16	new	Section 12	same
Sections 2, 4	new	13.1–13.4	new
Section 5	same	13.5	13.1
6.1–6.3	same	13.6	13.4
6.4	new	13.7	13.5

Chapter 1		Chapter 1	
3rd edition	2nd edition	3rd edition	2nd edition
13.8	13.9	13.42	13.38
13.9	13.10	13.43	13.39
13.10	13.13	13.44	13.40
13.11	13.14	14.1	same
13.12	13.17	14.2 a, b	new
13.13	13.18	14.2 c	14.2
13.14	13.19	14.3–14.8	same
13.15	13.20	14.9	revised
13.16	13.21	14.10–14.13	same
13.17	13.22	15.1	revised
13.18	13.30	15.2	new
13.19	13.32	15.3	revised
13.20	13.2	15.4	new
13.21	13.3	15.5–15.6	revised
13.22	13.6	15.7	same
13.23	13.7	15.8	15.12
13.24	13.8	15.9	15.13
13.25	13.11	15.10	15.14
13.26	13.12	15.11	15.15
13.27	13.15	15.12	15.16
13.28	13.16	15.13	15.17
13.29	13.23	15.14–15.22	new
13.30	13.24	15.23 a	15.18
13.31	13.25	15.23 b	15.19
13.32	13.26	15.23 c	15.20
13.33	13.27	15.23 d	15.21
13.34	13.28	15.24 a	15.23 b
13.35	13.29	15.24 b	15.23 c
13.36	13.31	15.24 c	15.23 d
13.37	13.33	15.24 d	15.24 a
13.38	13.34	15.24 e	15.24 b
13.39	13.35	15.24 f	15.24 c
13.40	13.36	15.25–15.26	same
13.41	13.37	15.27	revised

Chapter 1		Chapter 3	
3rd edition	2nd edition	3rd edition	2nd edition
15.28–15.33	same	2.4	8.2
16.1	revised	2.5	new
16.2–16.25	same	2.6	8.1
16.29	16.33	2.7	8.3
16.30–16.31	new	2.8	8.4
		2.9	8.5
		2.10	8.10
Chapter 2		2.11	2.7
3rd edition	2nd edition	2.12	2.8
Sections 4–9	same	2.13	8.9
10.1–10.32	same	2.14	8.15
10.33	new	2.15	8.21
11.1–11.5	same	2.16	8.22
11.6–11.7	new	2.17	8.23
11.8–11.9	same	2.18	8.24
11.10	new	3.1–3.14	same
11.11–11.18	same	3.15	new
12.1–12.19	same	3.16	same
12.20–12.22	revised	3.17	3.19
12.23–12.27	same	3.18	same
12.28	new	Sections 4-5	same
12.29–12.34	same	6.1	new
12.35	new	6.2–6.3	revised
12.36	same	6.4–6.6	same
12.37–12.38	new	6.7	6.13 a
14.1–14.24	same	6.8	6.13 b
14.25	new	6.9	9.1
Section 15	same	6.10	9.2
16.1–16.12	same	6.11	6.16
16.13	new	6.12	6.17
Section 17	same	6.13	6.18
Chapter 3		6.14	6.19
3rd edition	2nd edition	6.15	6.20
2.1–2.2	new	6.16	6.21
2.3	2.2		

Chapter 3		Chapter 3	
3rd edition	2nd edition	3rd edition	2nd edition
6.17	6.22	8.23–8.24	new
6.18	6.23 revised	8.25	8.30
6.19	6.24	8.26	8.12
6.20	6.25	8.27	8.14
6.21	6.26	8.28	8.16
6.22	6.27	9.1–9.2	new
6.23	6.28	9.3–9.4	same
6.24	6.30	9.5	10.1.3
6.25	6.8	9.6	same
6.26–6.32	new	9.7–9.8	new
7.1–7.12	same	9.9	3.9.14
7.13 a	7.13	9.10–9.13	same
7.13 b	new	9.14	10.1.1
7.14–7.17	same	9.15 a	3.9.15
7.18–7.35	new	9.15 b, c	new
8.1	8.26	9.16	same
8.2	8.27	9.17	new
8.3	8.28	9.18	10.1.2
8.4	8.29	9.19 a	10.15.25
8.5	8.39	9.19 b	new
8.6	8.40	9.19 c	10.1.5
8.7	8.41	9.20–9.25	new
8.8	8.34	10.1 a, b	10.3.4 a, b
8.9	8.35	10.1 c	new
8.10	8.36	10.2–10.6	new
8.11	8.37	10.7	10.3.9
8.12–8.15	new	10.8–10.10	new
8.16	8.33 revised	11.1	10.4.1
8.17	8.6	11.2	10.4.2
8.18	same	11.3	10.4.36
8.19	8.8	11.4–11.8	10.4.4–10.4.8
8.20	8.11	11.9–11.10	new
8.21	8.31	11.11–11.35	10.4.11–10.4.35
8.22	8.32	11.36–11.40	new

Chapter 3		Chapter 4	
3rd edition	2nd edition	3rd edition	2nd edition
11.41	10.15.35	Sections 1–3	same
11.42	10.15.36	4.1	same
11.43–11.62	new	4.2	revised
12.1–12.7	10.5.1–10.5.7	4.3–4.16	same
12.8–12.13	new	4.17	new
12.14	10.5.11	Sections 5–6	same
12.15	10.5.12	7.1–7.24	same
12.16–12.19	new	7.25 a, b	7.25
Sections 13–14	new	7.25 c	new
15.1–15.8	3.10.11–3.10.18	7.26–7.28	same
15.9	3.6.14	8.1–8.16	same
15.10	3.6.15	8.17 a	8.17
15.11	3.10.21	8.17 b, c	new
15.12	3.10.22	Section 9	same
15.13	3.10.23	10.1–10.13	same
15.14	3.6.10	10.14	10.15
15.15	3.10.19	11.1–11.11	same
15.16	3.10.20	11.12–11.13	new
15.17	new	Sections 12–13	same
15.18	10.15.1	Chapter 5	
15.19	10.15.2	3rd edition	2nd edition
15.20	10.15.3	Section 1	new
15.21	10.15.4	Section 2	same
15.22	10.15.5	3.1 to 3.31	same
15.23	10.15.6	3.32, 3.33	new
15.24	10.15.7	4.1, 4.2	revised
15.25	10.15.8	4.3	same
15.26	10.15.9	4.4 a	4.4 b
15.27	10.15.10	4.4 b	4.4 d
15.28	10.15.11	4.4 c	4.4 e
15.29	10.15.12	4.4 d	4.4 a
15.30	10.15.13	4.4 e	4.4 c
15.31	10.15.14	4.5–4.28	same
15.32	10.15.15	Sections 5–6	same
15.33–15.38	new		

Chapter 6		Chapter 7	
3rd edition	2nd edition	3rd edition	2nd edition
3.1–3.11	same	8.9	new
3.12 a	3.12	8.10–8.14	same
3.12 b	new	8.15	new
3.13–3.20	same	8.16–8.20	same
Section 4	same	8.21	8.9
6.1 to 6.20	same	9.1–9.15	same
6.21	new	9.16	new
Sections 7–8	same	9.17–9.24	same
9.1	new	9.25–9.27	new
9.2–9.12	same	Section 10	same
Section 10	same	11.1–11.10	same
11.1–11.16	same	11.11	new
11.17	revised	12.1–12.30	15.4.1–15.4.30
11.18–11.22	same	12.31	15.5.20
Section 12	same	12.32	15.5.21
		12.33	15.5.22
		12.34	15.5.23
		12.35	15.5.24
		12.36	15.5.25
		13.1–13.14	7.12.1–7.12.14
		13.15	15.10.10
		13.16	15.10.11
		13.17	15.10.12
		13.18	15.10.14
		13.19	15.10.17
		13.20	15.10.20
		13.21	15.10.21
		13.22	15.10.22
		13.23	15.10.19 a
Chapter 7		Chapter 8	
3rd edition	2nd edition	3rd edition	2nd edition
2.1–2.17	same	Section 1	same
2.18–2.20	revised	2.1 to 2.10	same
2.21–2.25	same	2.11, 2.12	new
3.1 to 3.7	same		
3.8	3.9		
Section 4	same		
5.1–5.8	same		
5.9–5.10	new		
5.11–5.13	same		
6.1–6.8	same		
6.9–6.10	new		
6.11	same		
6.12–6.15	new		
7.1–7.8	same		
7.9–7.10	new		
7.11–7.13	same		
8.1–8.8	same		

Chapter 8	
3rd edition	2nd edition
2.13	same
2.14–2.15	new
2.16	revised
2.17–2.35	same
3.1–3.5	same
3.6	new
3.7–3.23	same
4.1–4.20	same
4.21–4.26	new
5.1–5.38	same
5.39	new
5.40	same
Section 6	same
7.1	revised
7.2–7.14	same
7.15	new
7.16 a	7.15
7.16 b	7.19
7.16 c, d	new
7.17–7.22	new
7.23	7.21
7.24	new
7.25	12.21.22
7.26	12.21.23
7.27	12.21.17
7.28	12.21.21
7.29	12.21.9
7.30	12.21.12
8.1	15.2.1 revised
8.2–8.27	15.2.2–15.2.27
9.1–9.42	15.3.1–15.3.42
10.1–10.19	15.5.1–15.5.19
11.1	15.7.1 revised
11.2–11.4	15.7.2–15.7.4

Chapter 8	
3rd edition	2nd edition
11.5	15.7.5 revised
11.6–11.12	15.7.6–15.7.12
11.13–11.25	new
12.1–12.7	15.8.1–15.8.7
12.8	new
12.9–12.13	15.8.9–15.8.13
12.14 a	15.8.14 revised
12.14 b	new
12.15–12.18	15.8.15–15.8.18 revised
13.1–13.37	8.8.1–8.8.37
13.38	15.10.1
13.39	15.10.2
13.40	15.10.4
13.41	15.10.5
13.42	15.10.6
13.43	15.10.7
13.44	15.10.8
13.45	15.10.15
13.46	15.10.16
13.47	15.10.23
13.48	15.10.24

Chapter 9	
3rd edition	2nd edition
Section 1	same
2.1–2.7	same
2.8–2.10	new
Section 3	same
4.1	new
4.2–4.7	same
5.1a	5.1
5.1 b, c	new
5.2–5.11	same
5.12–5.18	new

Chapter 9		Chapter 11	
3rd edition	2nd edition	3rd edition	2nd edition
5.19	10.5.13	3.2 to 3.7	new
5.20	10.5.14	3.8	revised
5.21–5.25	new	3.9–3.11	new
6.1–6.6	same	3.12–3.15	revised
6.7	new	3.16–3.17	same
Section 8	same	5.1–5.3	new
Chapter 10		5.4	5.1
3rd edition	2nd edition	5.5	5.2
2.1	11.2	5.6	5.3
2.2, 2.3	new	5.7	15.2.1
2.4	11.1 revised	Sections 6–8	same
2.5 to 2.8	new	9.1–9.4	same
Sections 3–7	new	9.5–9.6	new
8.1–8.2	revised	10.1	same
8.3–8.14	same	10.2–10.7	new
8.15	new	11.1–11.3	revised
Section 9	same	11.4–11.5	same
10.1	new	11.6	revised
10.2	13.2	11.7	new
10.3–10.18	new	11.8	revised
11.1–11.4	new	11.9	same
11.5	15.16	11.10	new
11.6	15.18	12.1	revised
11.7	15.20	12.2–12.13	new
11.8	15.22	12.14–12.17	same
11.9	13.13	12.18	new
11.10	new	12.19–12.20	same
11.11	13.12	12.21	revised
11.12–11.13	new	12.22–12.23	same
Chapter 11		12.24–12.25	new
3rd edition	2nd edition	13.1–13.4	same
Section 2	same	13.5–13.6	new
3.1	same	13.7	same
		13.8	new
		13.9–13.10	same

Chapter 11		Chapter 12	
3rd edition	2nd edition	3rd edition	2nd edition
13.11	new	17.7 a	17.7
13.12–13.13	same	17.7 b	new
13.14	new	17.8	new
13.15–13.22	same	17.9	same
13.23–13.25	revised	17.10	new
		17.11	same
		17.12–17.16	same
		Sections 18–19	same
		20.1–20.10	same
		20.11–20.20	new
		21.1	21.6
		21.2	21.9
		21.3	21.10
		21.4	new
		21.5	21.12
		21.6	21.13
		21.7	21.14
		21.8	21.15
		21.9	21.16
		21.10	new
		22.1–22.28	same
		22.29–22.30	new
		23.1–23.16	same
		23.17	new
		23.18 a	23.18
		23.18 b	new
		23.19–23.26	same
		23.27–23.30	new
Chapter 12		Chapter 13	
3rd edition	2nd edition	3rd edition	2nd edition
1.1	1.3	1.1	same
1.2	1.7	1.2 a	1.2
1.3	new	1.2 b	new
1.4	1.1	1.3–1.4	same
1.5	new	Section 2	same
1.6	1.5		
1.7	1.8		
1.8	1.15		
1.9	1.16		
1.10	1.17		
2.1–2.2	same		
2.3–2.4	new		
Sections 3–7	same		
8.1–8.6	same		
8.7	new		
Sections 9–13	same		
Section 14	new		
15.1–15.5	same		
15.6	revised		
15.7 a	15.7		
15.7 b	new		
15.8	same		
15.9	new		
16.1–16.13	same		
16.14–16.17	new		
17.1–17.3	same		
17.4	new		
17.5–17.6	same		

Chapter 13		Chapter 14	
3rd edition	2nd edition	3rd edition	2nd edition
3.1–3.10	same	7.58	15.6.4
3.11–3.12	new	7.59	15.6.5
4.1–4.9	same	7.60	15.6.6
4.10–4.14	new	7.61	15.6.7
5.1 a	5.1	7.62	15.6.8
5.1 b	new	7.63	15.6.9
5.2 a	5.2	7.64	15.6.10
5.2 b	new	7.65	15.6.11
5.3 a	5.3	7.66	new
5.3 b	new	Sections 8–10	same
5.4–5.15	same	11.1–11.39	same
6.1 a	6.1	11.40–11.41	new
6.1 b	new		
6.2–6.5	same	Chapter 15	
6.6–6.8	new	3rd edition	2nd edition
7.1–7.16	same	1.1	new
7.17–7.22	new	1.2–1.10	16.1.2–16.1.10
8.1–8.5	same	2.1	new
8.6	15.8.19	2.2–2.10	16.2.2–16.2.10
8.7	15.8.20	2.11–2.18	16.2.11–16.2.18
8.8	15.8.21	2.19	new
8.9	15.8.22	3.1–3.23	16.3.1–16.3.23
9.1–9.7	15.9.1 to 15.9.7	4.1–4.4	16.4.1–16.4.4
10.1–10.27	13.9.1 to 13.9.27	4.5	new
10.28	15.10.25	4.6–4.8	16.4.6–16.4.8
Chapter 14		4.9	16.4.9 revised
3rd edition	2nd edition	4.10–4.21	16.4.10–16.4.21
Sections 1–5	same	4.22–4.23	new
6.1–6.36	same	5.1–5.17	16.5.1–16.5.17
6.37	new	6.1–6.8	16.6.1–16.6.8
7.1–7.54	same	6.9	16.6.12
7.55	15.6.1	6.10	16.6.10
7.56	15.6.2	6.11	16.6.11
7.57	15.6.3	6.12–6.16	new
		7.1–7.8	new

Chapter 15

3rd edition	2nd edition
7.9	16.7.9
7.10	16.7.10
7.11	16.7.11
7.12	16.7.14
7.13	16.7.15
8.1–8.7	new
8.8	16.8.1
8.9–8.10	new
8.11	16.8.4
8.12	16.8.5
8.13	16.8.6
8.14	16.8.7
8.15	16.8.8
8.16	16.8.9
8.17	16.8.10
8.18	16.8.11
8.19	16.8.12
8.20	16.8.13
8.21–8.23	new
8.24	16.8.18
8.25	16.8.21
9.1–9.5	16.9.1–16.9.5
9.6	16.9.6 revised
9.7–9.11	16.9.7–16.9.11
9.12–9.13	new
10.1–10.3	16.10.1–16.10.3
10.4	16.10.4 revised
10.5–10.10	16.10.5–16.10.10
11.1	16.11.1
11.2	16.11.2 revised
11.3–11.9	16.11.3 to 16.11.9
11.10–11.12	16.11.10–16.11.12 revised
11.13–11.14	16.11.13–16.11.14
11.15–11.16	16.11.15–16.11.16 revised
11.17–11.18	16.11.17 to 16.11.18