

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.*

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

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		
15.19	10.15.2		
15.20	10.15.3		
15.21	10.15.4		
15.22	10.15.5		
15.23	10.15.6		
15.24	10.15.7		
15.25	10.15.8		
15.26	10.15.9		
15.27	10.15.10		
15.28	10.15.11		
15.29	10.15.12		
15.30	10.15.13		
15.31	10.15.14		
15.32	10.15.15		
15.33–15.38	new		
		Chapter 5	
		3rd edition	2nd edition
		Section 1	new
		Section 2	same
		3.1 to 3.31	same
		3.32, 3.33	new
		4.1, 4.2	revised
		4.3	same
		4.4 a	4.4 b
		4.4 b	4.4 d
		4.4 c	4.4 e
		4.4 d	4.4 a
		4.4 e	4.4 c
		4.5–4.28	same
		Sections 5–6	same

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		Chapter 8	
3rd edition	2nd edition	3rd edition	2nd edition
2.13	same	11.5	15.7.5 revised
2.14–2.15	new	11.6–11.12	15.7.6–15.7.12
2.16	revised	11.13–11.25	new
2.17–2.35	same	12.1–12.7	15.8.1–15.8.7
3.1–3.5	same	12.8	new
3.6	new	12.9–12.13	15.8.9–15.8.13
3.7–3.23	same	12.14 a	15.8.14 revised
4.1–4.20	same	12.14 b	new
4.21–4.26	new	12.15–12.18	15.8.15–15.8.18 revised
5.1–5.38	same	13.1–13.37	8.8.1–8.8.37
5.39	new	13.38	15.10.1
5.40	same	13.39	15.10.2
Section 6	same	13.40	15.10.4
7.1	revised	13.41	15.10.5
7.2–7.14	same	13.42	15.10.6
7.15	new	13.43	15.10.7
7.16 a	7.15	13.44	15.10.8
7.16 b	7.19	13.45	15.10.15
7.16 c, d	new	13.46	15.10.16
7.17–7.22	new	13.47	15.10.23
7.23	7.21	13.48	15.10.24
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 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
		5.4	5.1
		5.5	5.2
		5.6	5.3
		5.7	15.2.1
		Sections 6–8	same
		9.1–9.4	same
		9.5–9.6	new
		10.1	same
		10.2–10.7	new
		11.1–11.3	revised
		11.4–11.5	same
		11.6	revised
		11.7	new
		11.8	revised
		11.9	same
		11.10	new
		12.1	revised
		12.2–12.13	new
		12.14–12.17	same
		12.18	new
		12.19–12.20	same
		12.21	revised
		12.22–12.23	same
		12.24–12.25	new
		13.1–13.4	same
		13.5–13.6	new
		13.7	same
		13.8	new
		13.9–13.10	same
Chapter 10			
3rd edition	2nd edition		
2.1	11.2		
2.2, 2.3	new		
2.4	11.1 revised		
2.5 to 2.8	new		
Sections 3–7	new		
8.1–8.2	revised		
8.3–8.14	same		
8.15	new		
Section 9	same		
10.1	new		
10.2	13.2		
10.3–10.18	new		
11.1–11.4	new		
11.5	15.16		
11.6	15.18		
11.7	15.20		
11.8	15.22		
11.9	13.13		
11.10	new		
11.11	13.12		
11.12–11.13	new		
Chapter 11			
3rd edition	2nd edition		
Section 2	same		
3.1	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 13	
		3rd edition	2nd edition
		1.1	same
		1.2 a	1.2
		1.2 b	new
		1.3–1.4	same
		Section 2	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		
6.6–6.8	new		
7.1–7.16	same		
7.17–7.22	new		
8.1–8.5	same		
8.6	15.8.19		
8.7	15.8.20		
8.8	15.8.21		
8.9	15.8.22		
9.1–9.7	15.9.1 to 15.9.7		
10.1–10.27	13.9.1 to 13.9.27		
10.28	15.10.25		
Chapter 14		Chapter 15	
3rd edition	2nd edition	3rd edition	2nd edition
Sections 1–5	same	1.1	new
6.1–6.36	same	1.2–1.10	16.1.2–16.1.10
6.37	new	2.1	new
7.1–7.54	same	2.2–2.10	16.2.2–16.2.10
7.55	15.6.1	2.11–2.18	16.2.11–16.2.18
7.56	15.6.2	2.19	new
7.57	15.6.3	3.1–3.23	16.3.1–16.3.23
		4.1–4.4	16.4.1–16.4.4
		4.5	new
		4.6–4.8	16.4.6–16.4.8
		4.9	16.4.9 revised
		4.10–4.21	16.4.10–16.4.21
		4.22–4.23	new
		5.1–5.17	16.5.1–16.5.17
		6.1–6.8	16.6.1–16.6.8
		6.9	16.6.12
		6.10	16.6.10
		6.11	16.6.11
		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