

Problems: Antenna Theory

The problems listed below comes from Balanis' book (3rd ed) and are the most relevant for this Antenna Theory course. Some of these problems will be solved on the blackboard during the tutorials and solutions will also be provided to other problems. Answers are given for most of the problems. In the right column, the equivalent numbering in the second edition of the book is given.

| Recommended | Solved on blackboard | Solution provided | Answers provided | Problem in Balanis' 2ed |
|-------------|----------------------|-------------------|------------------|-------------------------|
| 2.3 | 2.3 | | 2.3 | 2.2 |
| 2.6 | | | 2.6 | 2.3 |
| 2.7 | 2.7b | | 2.7 | 2.4 |
| 2.9 | | | 2.9 | 2.5 |
| 2.10 | | 2.10 | 2.10 | 2.6 |
| 2.11 | 2.11a | | 2.11 | 2.7 |
| 2.12 | | 2.12 | 2.12 | 2.8 |
| 2.13* | | 2.13* | 2.13* | 2.9 |
| 2.14 | 2.14 | | 2.14 | 2.10 |
| 2.15 | | 2.15 | 2.15 | 2.11 |
| 2.16 | | | 2.16 | 2.12 |
| 2.17 | | 2.17 | 2.17 | 2.13 |
| 2.18 | 2.18 | | 2.18 | 2.14 |
| 2.19 | | | 2.19 | 2.15 |
| 2.23 | 2.23 | | 2.23 | 2.19 |
| 2.24 | | | 2.24 | 2.20 |
| 2.27 | | | 2.27 | 2.23 |
| 2.32 | | | 2.32 | 2.27 |
| 2.33 | | 2.33 | 2.33 | 2.28 |
| 2.37 | | | 2.37 | 2.29 |
| 2.38 | | | 2.38 | 2.30 |
| 2.39 | 2.39 | | 2.39 | 2.31 |
| 2.40 | | 2.40 | 2.40 | 2.32 |
| 2.44 | | 2.44 | 2.44 | 2.36 |
| 2.47 | 2.47 | | 2.47 | 2.39 |
| 2.53 | 2.53 | | 2.53 | 2.45 |
| 2.66 | | 2.66 | | 2.47 |
| 2.80 | | 2.80 | 2.80 | 2.52 |
| 2.85 | | 2.85 | 2.85 | 2.57 |
| 2.93 | | 2.93 | 2.93 | 2.64 |
| 4.1 | 4.1 | 4.1 | 4.1 | 4.1 |
| 4.2 | | 4.2 | 4.2 | 4.2 |
| 4.5 | 4.5 | | | 4.3 |
| 4.6 | | 4.6 | | 4.4 |
| 4.9 | 4.9 | | 4.9 | 4.5 |
| 4.10 | | 4.10 | 4.10 | 4.6 |

* Apply 2.13 on 2.9 instead of 2.5.

| Recommended | Solved on blackboard | Solution provided | Answers provided | Problem in Balanis' 2ed |
|-------------|-------------------------|----------------------|---------------------|----------------------------|
| 4.11 | 4.11 OH | 4.11 | 4.11 | 4.7 |
| 4.19 | | 4.19 | 4.19 | 4.15 |
| 4.22 | | | 4.22 | 4.18 |
| 4.23 | | | 4.23 | 4.19 |
| 4.31 | | | 4.31 | 4.26 |
| 4.39 | | | 4.39 | 4.31 |
| 4.47 | | | 4.47 | 4.37 |
| 4.48 | | | 4.48 | 4.38 |
| 4.50 | 4.50 | | 4.50 | 4.40 |
| 4.51 | 4.51 | | | 4.42 |
| 4.61 | 4.61 OH | 4.61 | 4.61 | 4.46 |
| 4.62 | | | 4.62 | 4.47 |
| 4.64 | | 4.64 | 4.64 | 4.48 |
| 4.65 | | | 4.65 | 4.49 |
| 4.66 | 4.66 OH | 4.66 | 4.66 | 4.50 |
| 5.11 | 5.11 | | 5.11 | 5.6 |
| 5.14 | 5.14 | | 5.14 | 5.9 |
| 5.15 | | | 5.15 | 5.10 |
| 5.17 | 5.17 | | 5.17 | 5.12 |
| 5.18 | | 5.18 | 5.18 | 5.13 |
| 5.19 | | 5.19 | 5.19 | 5.14 |
| 5.20 | 5.20 | | 5.20 | 5.15 |
| 5.22 | 5.22a | | 5.22 | 5.17 |
| 5.23 | 5.23 OH | | 5.23 | 5.18 |
| 5.24 | | 5.24 | 5.24 | 5.19 |
| 5.26 | | | 5.26 | 5.20 |
| 6.1 | 6.1 | | 6.1 | 6.1 |
| 6.2 | 6.2 | | 6.2 | 6.2 |
| 6.3 | 6.3 | | 6.3 | 6.3 |
| 6.5 | | | 6.5 | 6.5 |
| 6.9 | | | 6.9 | 6.7 |
| 6.11 | 6.11 OH | 6.11 | 6.11 | 6.9 |
| 6.20 | | | | 6.15 |
| 6.28 | 6.28 | | 6.28 | 6.21 |
| 6.29 | | | 6.29 | 6.22 |
| 6.30 | | | 6.30 | 6.23 |
| 12.1 | 12.1 OH | 12.1 | 12.1 | 12.1 |
| 12.8 | | 12.8 | 12.8 | 12.8 |
| 12.10 | | | 12.10 | 12.10 |
| 12.21 | | | 12.21 | 12.19 |