

## Homework Assignment for MATH 478 Real Analysis I

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**Homework 1:** (Due to September 11)

Exercise 5.1.1, 5.2.1, 5.2.2, 5.3.3, 5.3.4, 5.3.5.

**Optional:** Exercise 5.3.1, 5.3.2.

**Homework 2:** (Due to September 21)

Exercise 5.4.1, 5.4.4, 5.4.5, 5.4.7, 5.5.2, 5.5.4, 5.6.1(a)(c)(e).

**Optional:** Other Exercise problems in Section 5.4-5.6.

**Homework 3:** (Due to September 25)

Exercise 6.1.2, 6.1.5, 6.1.8(b)(e)(g), 6.2.2(b), 6.3.2, 6.3.4.

**Optional:** Other Exercise problems in Section 6.1-6.3.

**Homework 4:** (Due to October 2)

Exercise 6.4.7, 6.4.8, 6.4.10, 6.5.1, 6.6.2, 6.6.3, 6.6.5.

**Optional:** Other Exercise problems in Section 6.4-6.7.

**Homework 5:** (Due to October 9)

Exercise 7.1.1(e), 7.1.4, 7.1.5, 7.2.2, 7.2.6.

**Optional:** Other Exercise problems in Section 7.1-7.2.

**Homework 6:** (Due to October 16)

Exercise 7.3.1, 7.3.2, 7.3.3, 7.4.1, 7.5.2, 7.5.3

**Optional:** Other Exercise problems in Section 7.3-7.5.

**Homework 7:** (Due to October 23)

Exercise 8.1.4, 8.1.6, 8.1.9, 8.2.2, 8.2.6

**Optional:** Other Exercise problems in Section 8.1-8.2.

**Homework 8:** (Due to October 30)

Exercise 8.3.2, 8.3.5, 8.4.2, 8.5.3, 8.5.5, 8.5.11

**Optional:** Other Exercise problems in Section 8.3-8.5.

**Homework 9:** (Due to November 6)

Exercise 9.1.1, 9.1.8, 9.1.10, 9.1.12, 9.1.15, 9.3.3

**Optional:** Other Exercise problems in Section 9.1-9.3.

**Homework 10:** (Due to November 13)

Exercise 9.4.4, 9.4.7, 9.5.1, 9.6.1, 9.7.2

**Optional:** Other Exercise problems in Section 9.4-9.7.

**Homework 11:** (Due to November 20)

Exercise 9.8.2, 9.8.3, 9.9.4, 9.9.6, 10.1.1, 10.1.4(d)

**Optional:** Other Exercise problems in Section 9.8-10.1.

**Homework 12:** (Due to December 2)

Exercise 10.2.6, 10.2.7, 10.3.5, 10.4.1, 11.1.3

**Optional:** Other Exercise problems in Section 10.2-11.1.

**Homework 13:** (Due to December 4)

Exercise 11.2.4(d), 11.3.2, 11.4.2, 11.4.3, 11.5.1,

**Optional:** Other Exercise problems in Section 11.2-11.5.

**Homework 14:** (Due to December 9)

Exercise 11.6.5, 11.8.4, 11.9.3, 11.10.3

**Optional:** Other Exercise problems in Section 11.6-11.10.