

Homework Math 165a Complex Analysis Winter 2020

Convention

Recall our convention that when we write something like $z = x + iy$, unless we state otherwise, we mean that x and y are real.

- The assignments are listed by the starting page number of the exercises in the 8th edition of the text, rather than by section. You can reference another document in iLearn if you don't have ready access to the 8th edition to see the homeworks by page number.
- A number of the exercises have answers following them. It is still worth looking at the exercises to try to understand them, but there is no need to turn them in.
- Homeworks are to be handed in at the beginning of lecture or sometimes discussion.

HOMEWORK 1: DUE TUE 21 JAN 2020

From the text:

- Page 5: 1, 2, 4, 8
- Page 8: 1, 4
- Page 12: 1, 4, 5
- Page 14: 2, 7, 10, 12, 15
- Page 22: 2, 6, 9
- Page 29: 1, 6, 7
- Page 33: 1, 4, 5, 7, 10

HOMEWORK 2: DUE TUE 28 JAN 2020

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Starting with homework 2, I have starred those exercises to be handed in. The others are worthwhile working for your own edification.

From the text:

- Page 37: 1, 3, 4
- Page 44: 3, 4, 7, 8
- Page 55: 1*, 3, 5*, 7*, 10, 11*

HOMEWORK 3: DUE MON 3 FEB 2020

From the text:

- Page 62: 2, 4*, 6(a), 7,
- Page 71: 1, 5, 6, 8*, 9, 10*

HOMEWORK 4: DUE TUE 18 FEB 2020

From the text:

- Page 77: 1, 2*, 6, 7*
- Page 92: 1, 3, 6, 11
- Page 97: 1, 3, 8, 9*
- Page 100: 2, 5,

HOMEWORK 5: DUE MON 24 FEB 2020

From the text:

- Page 121: 1, 3
- Page 125: 1, 3, 4, 5*
- Page 135: 1, 3, 5, 8*, 10

Comment: To solve Page 135 exercise 8, one could also use a result from lecture.

HOMEWORK 6: DUE TUE 3 MARCH FEB 2020

From the text:

- Page 140: 1, 5*
- Page 149: 1, 2
- Page 160: 1(a),(c),(f), 3, 4*, 7*

HOMEWORK 7: DUE TUE 10 MARCH FEB 2020

From the text:

- Page 170: 1, 3*, 5, 7, 10*
- Page 178: 3*, 4, 6, 8

For problem 6 page 178, the text should say “See Exercises 1 and 3.”