# **Math 43 Tentative Homework**

LEARN: You should consult your notes, your textbook, the solution manual, a tutor or study partner as

needed when doing these exercises, to make sure you understand the logic of the problem solving process. Check your answers against the solutions, figure out what you did incorrectly, and redo the

problem, writing the solution logically, clearly and succinctly. Then do another (possibly unassigned) problem of the

same type to make sure you understand.

PRACTICE : Try to do these without any of the help mentioned above. Check your answers against the solutions

<u>only</u> when you have come up with your own answer. If your answer was incorrect, try to figure out what you did incorrectly without getting help. Then do another (possibly unassigned) problem of the

same type to make sure you understand. Do more learning problems if needed.

TEST : Do these without any help. Make sure you can complete these all the way through without stopping

for extended periods of time to think about the next step. Think how to check your answer without

using the solutions. Do more learning and practice problems if needed.

Remember: If you hope to pass this class, you should do more than the homework assigned below.

#### **MIDTERM 1 SECTIONS**

10.2

10.8

9.2

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1.2 LEARN : 5, 71, 73, 75, 79, find center & radius of 3x^2 + 3y^2 + 6x + 12y - 33 = 0 (Answer: (-1, -2), 4)
PRACTICE : 81, find center & radius of 2x^2 + 2y^2 - 12x + 16y + 24 = 0 (Answer: (3, -4), \sqrt{13})
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TEST : 72, 74, 76, 82, find center & radius of  $4x^2 + 4y^2 + 12x - 20y - 2 = 0$ 

LEARN : 1–13, 23, 25, 29, 39, 45, 51, 55, 57, 59, 71, 83, 84, 87

PRACTICE : 17, 21, 27, 31, 41, 47, 54, 73

TEST : 18, 22, 26, 32, 42, 48, 52, 58, 60, 75

10.3 LEARN : 1–4, 7, 9, 11, 13, 17, 19, 23, 25, 35, 41, 57, 61, 63, 65, 69, 73, 76

PRACTICE : 15, 21, 22, 26, 39, 45, 59

TEST : 10, 14, 18, 24, 27, 49, 51, 60, 62

10.4 LEARN : 1–5, 13, 15, 19, 29, 31, 33, 35, 39, 43, 51, 53, 57, 59, 63

PRACTICE : 11, 17, 21, 37, 41, 45, 65, 67, 69
TEST : 10, 18, 22, 36, 40, 46, 60, 66, 68, 70

10.7 LEARN : 1–5, 11, 21, 31, 43, 45, 65, 67, 73, 77, 101, 105, 109, 111, 113, 117, 119–121, 123

PRACTICE : 7, 17, 25, 33, 39, 51, 69, 75, 87, 91, 93, 97, 99, 107
TEST : 6, 12, 26, 35, 46, 48, 74, 81, 102, 108, 110, 112, 114, 118

LEARN : 1–7, 9, 13, 19, 23, 29, 33, 34, 39, 69, 70, 79

PRACTICE : 17, 21, 25, 31, 41

TEST : 8, 10, 11, 14, 20, 26, 30, 37, 38, 42

10.9 LEARN : 1–4, 15, 19, 23, 39, 41, 43, 45, 49, 53, 63, 65

PRACTICE : 17, 21, 25, 47, 51, 52

TEST : 16, 22, 28, 40, 42, 44, 48, 50, 54

#### **MIDTERM 2 SECTIONS**

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10.6 LEARN : 1–5, 9, 13, 17, 21, 23, 27, 29, 38, 50, 52, 56, 61b, 63, 69, 70
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PRACTICE : 6, 11, 19, 25, 31, 39 TEST : 12, 14, 18, 22, 26, 32, 34

9.1 LEARN : 1–8, 13, 17, 33, 47, 57, 63, 67, 73, 79, 91, 105, 113, 121, 127, 129

PRACTICE : 21, 31, 49, 53, 65, 69, 75, 81, 93, 111, 115, 124

TEST : 19, 26, 34, 51, 62, 70, 74, 83, 94, 112, 116, 128

LEARN : 1–4, 5, 15, 25, 37, 47, 57, 59, 71, 91, 101, 105

PRACTICE : 13, 21, 29, 39, 49, 55, 61, 73, 95, 102, 106

TEST : 9, 17, 31, 40, 50, 58, 64, 74, 100

9.3 LEARN : 1–4, 11, 21, 31, 37, 47, 53, 71, 87, 101, 106, 109, 115, 117, 127, 137, 138

PRACTICE : 7, 25, 29, 39, 51, 83, 89, 103, 107, 133
TEST : 16, 27, 33, 41, 52, 85, 92, 105, 110, 118, 134

9.4 LEARN : 1–4, 5, 15, 17, 19, 27, 37, 47 (prove your answer by induction), 57

PRACTICE: 7, 13, 25, 43, 48 (prove your answer by induction), 55

TEST : 8, 24, 30, 39, 58

9.5 LEARN : 1–4, 9, 15, 21, 31, 43, 47, 59, 61, 67, 73, 93-98, 101, 105

PRACTICE : 11, 17, 27, 37, 41, 49, 54, 63, 69, 75
TEST : 10, 16, 23, 35, 42, 51, 57, 65, 68, 74

# MIDTERM 3 SECTIONS

6.3	LEARN	:	1–11, 19, 29, 31, 41, 49, 53, 59, 63, 69, 77, 83, 85, 103–111
	<b>PRACTICE</b>	:	21, 28, 35, 47, 51, 55, 61, 76, 87
	TEST	:	12, 24, 30, 36, 48, 50, 56, 62, 64, 71, 78, 84, 88
6.4	LEARN	:	1–7, 17, 23, 25, 35, 45, 49, 53, 59, 67, 71, 73, 79, 90, 91
	<b>PRACTICE</b>	:	11, 19, 41, 55
	TEST	:	13, 20, 27, 44, 47, 51, 57, 61, 69, 74, 81
11.1	LEARN	:	1–9, 11, 17, 21, 29, 41, 47, 59, 67, 71, 79, 81, 83, 85
	<b>PRACTICE</b>	:	13, 19, 25, 31, 43, 49, 57, 69, 73
	TEST	:	10, 15, 20, 22, 35, 42, 51, 60, 68, 74
11.2	LEARN	:	1–7, 9, 11, 17, 19, 29, 31, 37, 39, 47, 51, 55, 57, 61, 63
	<b>PRACTICE</b>	:	13, 25, 33, 35, 43, 49, 53
	TEST	:	8, 10, 18, 27, 30, 34, 38, 45, 48, 54, 56, 58
11.3	LEARN	:	1–11, 21, 33, 39, 43, 49, 53, 55, 59, 63–66
	<b>PRACTICE</b>	:	19, 25, 31, 41, 45, 47, 51, 57
	TEST	:	20, 29, 35, 37, 46, 48, 54, 56, 60
11.4	LEARN	:	1–5, 9, 11, 19, 25, 29, 31, 33, 35, 37, 41, 43, 47, 51, 59, 63, 65, 67
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## PRACTICE : 7, 13, 23, 27, 39, 49, 53, 57

TEST : 10, 15, 20, 26, 30, 32, 34, 36, 38, 42, 44, 48, 55, 58

#### **POST-MIDTERM 3 SECTIONS**

7.1

7.5

LEARN

LEARN

TEST

PRACTICE TEST

PRACTICE

7.2	LEARN	:	1–3, 17, 29, 43, 51, 53, 63–65, 71, 73
	<b>PRACTICE</b>	:	19, 35, 49
	TEST	:	25, 41, 50
7.3	LEARN	:	1–6, 9, 13, 19, 25, 33, 45, 53, 59, 61, 65
	<b>PRACTICE</b>	:	8, 11, 21, 23, 35, 63, 67
	TEST	:	15, 27, 29, 39, 47, 54, 71
8.1	LEARN	:	1–9, 23, 31, 39, 41, 45, 57, 71, 79, 95, 107, 117–118
	<b>PRACTICE</b>	:	11, 25, 33, 40, 43, 47, 73, 81, 109
	TEST	:	12, 24, 34, 44, 46, 58, 75, 83, 97
8.2	LEARN	:	1–6, 9, 13, 21, 31, 33, 35, 47, 53, 61, 65, 67, 77–86
	<b>PRACTICE</b>	:	15, 23, 37, 49, 55, 69, 75
	TEST	:	10, 14, 24, 32, 38, 40, 51, 54, 63, 73
8.3	LEARN	:	1–5, 9, 15, 19, 41, 45, 51, 57, 63, 69, 77, 79
	<b>PRACTICE</b>	:	7, 17, 20, 55, 73
	TEST	:	11, 16, 24, 43, 52, 58, 64, 74
8.4	LEARN	:	1–4, 7, 29, 33, 37, 39, 51, 65, 67, 71, 73, 75, 79, 87, 91–93
	<b>PRACTICE</b>	:	9, 31, 35, 45, 81, 89
	TEST	:	15, 32, 38, 49, 66, 70, 76, 83, 90

1–6, 9, 13, 15, 31

15, 19, 35, 39, 53, 69, 77

18, 36, 40, 44, 46, 52, 62, 79

1-7, 17, 33, 37, 43, 47, 49, 51, 63, 75, 81, 85, 87, 89, 91-94

17, 33

19, 32