

# 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 <b>only</b> 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

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: $(3, -4)$ , $\sqrt{13}$ )
	TEST	:	72, 74, 76, 82, find center & radius of $4x^2 + 4y^2 + 12x - 20y - 2 = 0$
10.2	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
10.8	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

10.6	LEARN	:	1-5, 9, 13, 17, 21, 23, 27, 29, 38, 50, 52, 56, 61b, 63, 69, 70
	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
9.2	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, 47 (prove your answer by induction), 57
	PRACTICE	:	7, 13, 18, 23, 43, 48 (prove your answer by induction), 55
	TEST	:	8, 14, 24, 44 (prove your answer by induction), 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
	PRACTICE	:	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
	PRACTICE	:	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
	PRACTICE	:	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
	PRACTICE	:	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
	PRACTICE	:	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
	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

7.2	LEARN	:	1–3, 17, 29, 43, 51, 53, 63–65, 71, 73
	PRACTICE	:	19, 35, 49
	TEST	:	25, 41, 50
7.3	LEARN	:	1–6, 9, 13, 19, 25, 33, 45, 53, 59, 61, 65
	PRACTICE	:	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
	PRACTICE	:	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
	PRACTICE	:	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
	PRACTICE	:	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
	PRACTICE	:	9, 31, 35, 45, 81, 89
	TEST	:	15, 32, 38, 49, 66, 70, 76, 83, 90
7.1	LEARN	:	1–6, 9, 13, 15, 31
	PRACTICE	:	17, 33
	TEST	:	19, 32
7.5	LEARN	:	1–7, 17, 33, 37, 43, 47, 49, 51, 63, 75, 81, 85, 87, 89, 91–94
	PRACTICE	:	15, 19, 35, 39, 53, 69, 77
	TEST	:	18, 36, 40, 44, 46, 52, 62, 79