Lansing Community College
Department of Mathematics and Computer Science
MATH126 Homework Assignments (Bittinger, Beecher, Ellenbogen, Penna, $3^{\text {rd }}$ ed.)

| Section | Pages | Problems |
| :---: | :---: | :---: |
| R. 1 | 7-8 | 1, 3, 5, 6, 7, 9, 13, 17, 19, 23, 25, 27, 59, 63, 81, 83, 85 |
| R. 2 | 14-16 | $1,13,15,19,23,27,29,31,39,43,63,79,83,85,87,89,91,99,101$ |
| R. 3 | 20-21 | 3, 9, 13, 19, 27, 28, 31, 33, 37, 39, 41, 43, 44, 45, 47, 50, 51 |
| R. 4 | 29-30 | 7, 11, 27, 29, 49, 57, 67, 75, 77, 89, 103, 119, 121, 125, 129, 131, 137 |
| R. 5 | 36-38 | $1,3,7,9,13,15,19,21,25,29,31,39,43,47,55,61,63,65,66$ |
| R. 6 | 45-47 | $1,19,23,31,33,35,39,45,49,53,55,59,61,65,69,71,75,79,83 \text {, }$ 85, 89, 91, 93, 97, 103, 107, 109, 111, 113, 119, 121, 125, 127 |
| R. 7 | 50-51 | 19, 21, 23, 25, 27, 31, 33, 35, 39, 43, 45, 47, 49, 51, 53, 57, 59, 61, 63 |
| Review* | 53-54 | $1,2,3,4,5,6,7,8,10,11,13,15,17,20,21,22,23,24,25,27,30,31 \text {, }$ $33,36,38,40,42,43,46,47,48,49,50,53,55,57,59,66,67,69$ |
| 1.1 | 71-75 | $3,5,7,9,13,17,21,23,33,35,37,39,43,47,51,53,55,57,59,63$, $65,67,69,71,73,75,77,79,81,83,85,89,93,95,97,99,103,107$, 109, 111, 113, 121, 123, 125, 127, 129 |
| 1.2 | 86-90 | $\begin{aligned} & 1,3,5,7,11,13,17,19,21,25,27,31,37,39,41,43,45,48,49,51 \text {, } \\ & 53,59,61,63,69,71,75,89 \end{aligned}$ |
| 1.3 | 100-103 | $\begin{aligned} & 1,3,5,7,11,15,17,21,27,29,37,41,43,45,47,49,51,55,57,59 \text {, } \\ & 65,67,68,69,70,71 \end{aligned}$ |
| 1.4 | 116-121 | $\begin{aligned} & 3,5,7,9,13,15,17,21,25,27,35,41,45,47,49,51,53,57,63,65 \text {, } \\ & 67,71,73,75,77,79,81,89,91,95 \end{aligned}$ |
| 1.5 | 130-135 | $\begin{aligned} & 1,3,5,6,13,15,19,21,23,27,29,33,35,39,41,43,45,47,53,55 \text {, } \\ & 57,61,69,71,73,83 \end{aligned}$ |
| 1.6 | 145-147 | $\begin{aligned} & 1,3,5,7,9,11,15,17,19,21,23,25,27,29,31,33,35,37,45,51,53, \\ & 57,59,61,63,67,71,75,77,81,83,85,87,89,92,103,105 \end{aligned}$ |
| 1.7 | 164-168 | $1,3,5,7,13,17,19,23,25,29,33,35,37,39,41,47,49,51,53,55$, 59, 63, 75, 81, 83, 85, 87, 89, 91, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 125, 127, 131, 139, 143, 147, 151, 157 |
| Review* | 170-173 | $\begin{aligned} & 1,3,5,7,9,11,13,18,19,21,23,25,27,29,31,33,35,37,39,41,43, \\ & 45,47,48,51,55,57,59,61,63,65,69,71,73,75,77,83,85,87,90 \end{aligned}$ |
| 2.1 | 190-195 | $\begin{aligned} & 5,11,17,19,21,25,27,31,33,39,42,49,53,57,63,67,73,77,79 \text {, } \\ & 81,83,85,87,89,91,99,105,107,111,112,113,115 \end{aligned}$ |
| 2.2 | 202-203 | $\begin{aligned} & 1,9,13,25,27,33,35,43,53,55,59,61,63,65,67,69,71,73,75,79 \text {, } \\ & 82,83,85,87 \end{aligned}$ |
| 2.3 | 217-220 | $1,3,5,7,9,11,13,15,17,19,21,23,29,33,39,41,43,49,53,55,59$, $63,67,73,83,87,91,93,97,99,101,107,109,113,117,119,121$ 123, 125, 129, 131, 135, 137, 139, 141, 143, 145 |
| 2.4 | 231-234 | $\begin{aligned} & 1,3,5,11,13,15,17,19,23,25,27,31,33,39,41,43,44,47,51,59 \text {, } \\ & 61,63,64,65 \end{aligned}$ |
| 2.5 | 241-243 | $\begin{aligned} & 3,5,9,13,23,27,35,37,39,41,47,51,59,63,71,75,79,91,95,97 \text {, } \\ & 99,101,103,104,105,107,111,113 \end{aligned}$ |
| 2.6 | 249-250 | $\begin{aligned} & 1,5,7,9,13,17,21,25,29,31,35,39,41,45,47,51,53,57,59,65 \text {, } \\ & 67,69,71,73,77,79,81 \end{aligned}$ |
| Review* | 252-254 | $\begin{aligned} & 3,5,7,9,11,13,15,17,18,19,20,21,23,25,27,28,29,30,31,33 \\ & 34,35,36,37,39,41,43,47,51,53,57,59,61,62,63,67,68,71,73 \end{aligned}$ |
| 3.1 | 269-274 | $1,3,5,9,11,12,13,15,17,19,21,23,24,25,27,29,31,33,35,37$, 39, 41, 43, 45, 48, 49, 51, 53, 55, 56, 57, 59, 65, 67, 69, 71, 73, 75, 77 |
| 3.2 | 283-284 | $1,3,5,6,7,9,11,13,17,19,21,31,33,35,37,39,41,43,45,47,51$ |
| 3.3 | 291-293 | $\begin{aligned} & 1,3,5,7,9,11,15,19,21,23,27,29,30,31,35,37,38,39,41,45,47 \text {, } \\ & 49,53,55,57,59,63,65,67,69,73 \end{aligned}$ |
| 3.4 | 301-303 | $3,5,7,9,11,13,15,17,21,23,25,27,29,31,33,39,41,43,45,47$, $49,51,53,55,61,67,69,71,73,75,77,79,83,87,93,95,97,99,113$ |


| 3.5 | $318-321$ | $\begin{aligned} & 1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31,35,39,43,47,51 \text {, } \\ & 57,59,61,65,69,71,73,75,77,78,79,91,93 \end{aligned}$ |
| :---: | :---: | :---: |
| 3.6 | $327-330$ | $\begin{aligned} & 1,3,5,6,7,9,11,13,17,21,23,25,29,35,43,45,47,49,51,53,54 \text {, } \\ & 57,61,63,65,67,69,71,72,79,85,87 \end{aligned}$ |
| 3.7 | 336-339 | $1,3,5,7,13,15,17,19,25,27,29,31,35,43$, |
| Review* | 341-344 | $1,3,5,7,9,11,13,14,15,17,19,21,23,25,27,29,31,33,35,37,38$, $39,40,41,43,45,47,49,51,53,55,57,59,61,63,65,67,69,70,71$, 73, 75, 77, 79, 81, 93, 95, 97 |
| 4.1 | $356-360$ | $1,3,5,7,11,15,21,23,25,27,29,31,33,35,39,47,49,53,55,59$, $61,63,67,69,71,73,75,83,85,91,95,97,98,99,101,103,105,107$, 109, 111, 113, 117 |
| 4.2 | 370-374 | $\begin{aligned} & 1,3,5,7,9,11,15,21,25,27,31,35,37,41,43,45,55,59,61,63,65 \text {, } \\ & 67,69,71,77,79,83,91,95,99,101,103 \end{aligned}$ |
| 4.3 | 388-391 | $1,3,5,7,9,13,15,17,19,21,23,25,27,29,31,33,35,37,39,41,43$, $45,47,49,50,51,55,59,61,63,65,67,69,73,75,77,79,81,83,85$, 87, 89, 93, 95, 107, 109, 111, 113, 114, 119 |
| 4.4 | 397-399 | $3,5,7,9,11,13,15,17,19,21,23,25,27,29,31,33,35,37,43,45$, $47,49,51,53,55,57,59,61,63,65,67,69,71,73,75,77,78,79,81$, 83, 85, 86, 89, 91, 92, 93, 95, 97, 103, 107, 109 |
| 4.5 | 407-408 | $\begin{aligned} & 1,3,5,7,9,13,15,17,19,21,23,27,31,33,35,36,45,49,53,55 \text {, } \\ & 57,59,73,75,77,79,87,88 \end{aligned}$ |
| 4.6 | 417-423 | $1,3,5,7,9,11,13,15,16,21,25,27,35,37,39,41$ |
| Review* | 426-428 | $1,2,3,5,7,9,11,13,14,15,17,19,21,23,25,27,29,31,33,35,37$, $39,41,45,47,49,51,53,55,57,57,59,61,63,65,67,69,71,73,75$, 81, 83, 84, 87, 88 |
| 5.1 | 442-444 | $\begin{aligned} & 1,5,7,9,13,17,19,21,23,25,27,29,31,37,43,49,55,59,63,67 \text {, } \\ & 71,73,77,79,81,83,85,87,93,95,97 \end{aligned}$ |
| 5.2 | 451-455 | 1, 9, 11, 17, 21, 25, 31, 39, 41 |
| 5.3 | 468-470 | 1, 9, 11, 15, 19, 21, 27, 29, 33, 35, 39, 45, 51, 69, 71, 73, 75, 79, 83, 85, |
| 87, |  |  |
|  |  | 89, 97, 99, 101, 103, 105, 107 |
| 5.4 | 482-486 | 1, 3, 5, 7, 9, 17, 23, 27, 33, 37, 45, 49, 59, 65, 67, 69, 71, 73, 75, 77 |
| 5.5 | 501-503 | 1, 5, 7, 9, 11, 17, 19, 23, 25, 27, 33, 37, 39, 43, 47, 49, 51, 73 |
| 5.6 | 518-521 | $\begin{aligned} & 1,3,9,13,15,17,19,21,25,27,33,35,37,41,43,49,53,59,75,81 \text {, } \\ & 85,89,93 \end{aligned}$ |
| Review* | 524-527 | $1,4,5,7,11,12,14,16,17,19,22,23,25,27,29,34,35,37,38,39$, $40,42,44,48,49,51,53,55,57,59,60,62,64,66,68,69,71,73,75$, 77, 79, 81 |
| 6.1 | 541-543 | $\begin{aligned} & 1,5,11,13,19,23,27,31,37,43,45,49,51,53,55,57,61,65,67,69 \text {, } \\ & 75,77,87,89,91,93,101 \end{aligned}$ |
| 6.2 | 550-553 | $1,3,5,9,11,13,17,19,23,25,27,29,31,33,39,55,61$ |
| 6.3 | 557-559 | 1, 3, 5, 9, 11, 17, 23, 29, 31, 33, 37, 49, 51 |
| 6.4 | 570-572 | $\begin{aligned} & 1,5,9,11,13,17,21,25,27,31,33,35,39,41,43,45,47,49,51,55 \text {, } \\ & 57,59,61,63,67,69,71,85,87 \end{aligned}$ |
| 6.5 | 584-586 | ```1, 3, 7, 9, 11, 15, 17, 19, 21, 23, 27, 29, 31, 33, 37, 41, 45, 47, 51, 53, 59,67``` |
| Review* | 588-590 | $2,3,5,7,8,10,11,13,14,16,17,18,20,21,23,25,27,29,30,32,33$, $34,36,38,41,43,44,45,46,47,48,49,50,53,54,55,56,57,59,60$, 61, 63, 65, 66, 67, 69, 74, 76 |
| 7.1 | 604-606 | 1, 3, 9, 13, 17, 21, 23, 25, 31, 33 |
| 7.2 | 613-615 | 1, 7, 9, 13, 17, 19, 21, 27, 31, 49 |
| 7.3* | 626-628 | $1,3,5,9,11,13,15,17,23,25,29,33,35,37,39,43,45,47,49,51$, (Omit roots of complex numbers.) |
| 7.4 | 638-640 | $\begin{aligned} & 1,3,5,7,8,9,11,13,15,19,21,27,31,35,37,43,49,51,53,59,61 \text {, } \\ & 63,67,73,79,81,85,92,99,107 \end{aligned}$ |
| 7.5 | 646-649 | $5,9,13,15,17,19,21,25,27,29,31,33,37,39,41,45,47$ |



You will need a graphing calculator for this course. It is your responsibility to bring the calculator with you to all classes and tests and to know how to use it. The topics in this course include how to use the $\mathrm{TI}-83$ graphing calculator, complete graphs, functionsdomain, range, graphing and composition, mathematical models, symmetry, absolute value, distance, circles, linear and quadratic functions/equations, maximums and minimums, intervals, geometric transformations, real and complex zeros of polynomials, rational functions/inequalities, exponential equations/functions and graphs, logarithmic equations/functions and graphs, regression, angles, trigonometric functions, unit circle, graphs of trig functions, transformations of trig graphs, inverse trig functions, solving trig equations/inequalities graphically and analytically, justifying trig identities, sum and difference identities, double angle identities, half-angle identities, laws of sines and cosines, vectors, polar coordinates, systems of equations, sequences, S, binomial theorem, math induction*, counting*, permutations*, and combinations*.
*optional.

