



## INTERMEDIATE ALGEBRA WITH SUPPORT

MATH 64 - 32

FALL 2018 - SECTION 1749-3155-3156

MIRACOSTA COLLEGE

CLASS TIME: MTWTH 9:30-11:20

ROOM: OC 3507

### DR. LEILA SAFARALIAN



**Office:** OC 3617

**Office Telephone:**  
(760)757-2121, EXT 6304

**Student Office Hours:**  
Mondays & Wednesdays  
11:30-12:30

**E-mail:**  
[lsafaralian@miracosta.edu](mailto:lsafaralian@miracosta.edu)

**Prerequisites:** A grade of “C” or better in either Math 20, 28, 30 or qualifying through the math placement process.

**Course Description for Math 32:** This course reviews the core prerequisite skills and concepts for Intermediate Algebra. Topics in Math 32 are taught strategically throughout a semester to provide “just in time” instruction of prerequisite skills needed to master concepts in Math 64 as they arise. Math 32 is offered as pass/no pass only.

**Course Description for Math 64:** This algebra course covers relations and functions, interval notation and inequalities, absolute value functions, exponents and radicals, quadratic functions, circles, logarithmic and exponential functions.

**Student Learning Outcomes:** For a given set of problems the student will demonstrate quantitative reasoning by developing a problem-solving strategy, performing appropriate analysis and computation, and critically assessing the meaning of the conclusion or outcome.

**Required Text:** *Intermediate Algebra by OpenStax*, ISBN: 9780998625720. The PDF of this textbook is free and you can directly download or print it from the OpenStax website. You do not need to have a hardcopy or a paperback copy of this textbook unless you desire to. You may go to <https://openstax.org/details/books/intermediate-algebra> and you can view the textbook online for free or download the PDF for free.

Intermediate  
**Algebra**



**Calculator:** Required scientific calculator will be provided at no cost for the classroom use. However, if you are going to purchase a calculator for this course, a good choice is the TI-30XIIS, which costs about \$15.

## IMPORTANT COLLEGE DATES AND DEADLINES



<b>Drop with no record &amp; full refund</b>	• <b>09/02/2018</b>
<b>Pass/No Pass Option</b>	• <b>09/21/2018</b>
<b>Drop Class with a "W" grade</b>	• <b>11/16/2018</b>

**Homework:** Please see the list of homework assignments on page 12 of the syllabus. An opportunity for discussion will be available at the beginning of each class session. Sloppy, careless, messy answers or solutions may result in less point for effort. To take credit for a particular homework problem, please show how you arrived at your answer. Late homework will not be accepted.

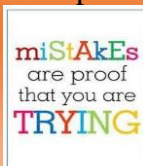
**The grading scale for homework is:**

- Completed all problems, showed all work, work stapled, neat, name on paper - 5 points
- Completed 50% of problems, showed partial work, work stapled, neat, name on paper - 2 points
- Completed less than 50% of problems or no work shown, no name, not stapled -0 point

**Homework-Quiz:** You can earn a maximum of 20 points for each homework quiz score. That includes the points you earn on a HW quiz (20 points possible) and homework (5 points possible). So if you earn 18 on the quiz and 4 on the homework, you would earn the max of 20 on the HW Quiz. Throughout the semester, a random subset of the problems taken directly from the assigned HW problems will be given as a homework quiz (HQ). Points will be deducted for each problem in which answers are incorrect or given without justification. Partial credit will be given as appropriate.

**Lecture:** Attending class is an important component of learning. Each meeting includes some notes and discussion to help clarify and understand the main ideas of the sections covered. Students who miss class are still responsible for announcements or changes regarding the course outline, class activities, homework assignments, due dates and exam dates. Prior to class, skim through the section and work some of the examples. After lecture, reread the text and review your lecture notes before starting the homework set.

**SI Sessions:** Supplemental Instruction (SI) sessions are group learning sessions led by a qualified peer leader to help you succeed in in this course. SI Sessions for MATH 64-32 will be held on Monday and Wednesday, from 11:30 pm - 12:20 pm in OC12021 (located inside the Library Hub).

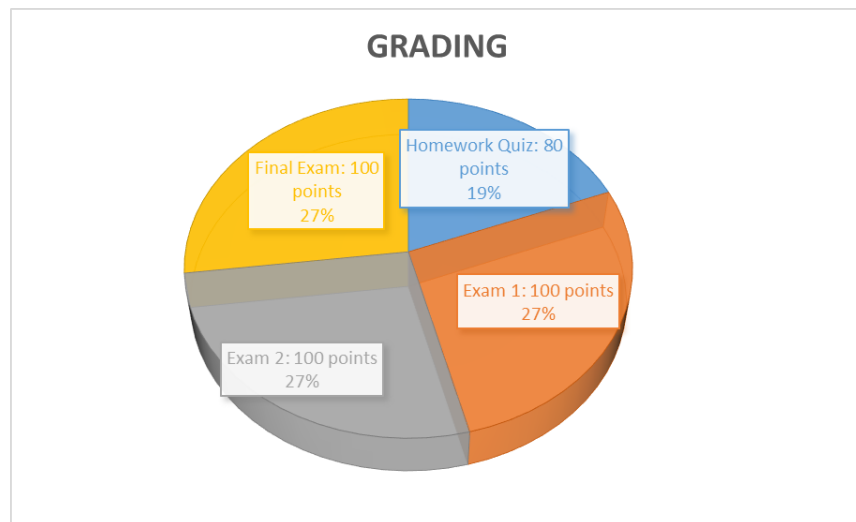
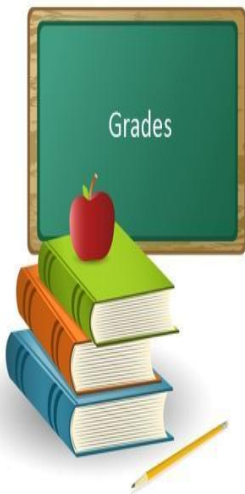


**Grading:**

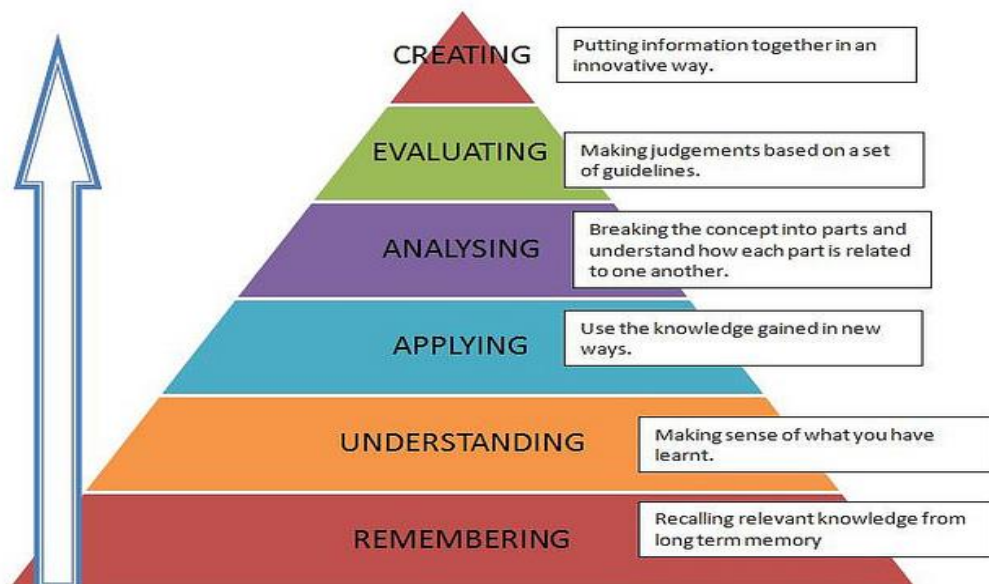
Homework Quiz	Exam 1	Exam 2	Final Exam
80	100	100	100

Numerical course grades are rounded to the nearest whole percentage and translate to a letter grade. A= 90%-100% B=80%-89% C=70%-79% D=65%-69% F=0%-64%

All grades will be posted on Canvas. To access Canvas you go to <http://www.miracosta.edu/instruction/ais/tic/canvas/index.html>



**BLOOM'S TAXONOMY**





You have to get up every  
morning and tell yourself  
“I can do this”



## STUDENT RESOURCES

**Math Learning Center:** The MLC is open to all math students at MiraCosta. Services include drop-in tutoring, 1:1 appointment for all students with extended time for DSPS students, group tutoring focused on specific courses, computerized tutorials, and homework help. Calculators, textbooks, whiteboards, and headphones are available for use in the MLC. <http://www.miracosta.edu/instruction/mathematics/mlc/index.html>

**Oceanside:** BLDG. 1200  
Phone number: (760)757-  
2121 x 6381

M – TH: 8:00 am – 9:00 pm  
Friday: 8:00 am – 3:00 pm  
Saturday: 12:00 pm-5:00 pm  
Sunday: Closed

**San Elijo:** BLDG. 100 Phone  
number: (760)757-2121 x  
7781

M – TH: 9:00 am – 8:00 pm  
Friday: 9:00 am – 3:00 pm  
Saturday/Sunday: Closed

**Community Learning**

**Center:** Room 136 Phone  
number: (760)757-2121 x  
8843

M – F: 8 am – 1 pm  
Saturday/Sunday: Closed

**Nordson STEM Center:** The STEM Center is located on the Oceanside campus and supports all students in STEM courses. The STEM Center offers free Drop-In Tutoring for many courses in biology, biotechnology, chemistry, physics, and physical science. The STEM Center also hosts Drop-In Counseling hours, group study rooms (reserve online), laptops, molecular models, and many textbooks for STEM Center usage. Many STEM Workshops are offered to help students succeed in their STEM courses and explore career/job opportunities in STEM related fields.

Location: OC 1200. Phone number: 760.757.2121, x6388

<http://www.miracosta.edu/student-services/stem/index.html>

### **Online Academic Support Resources for ALL Students**

[online tutoring](#), [online writing center](#), and the [24x7 online ask-a-librarian service](#). These services are open to all MiraCosta students in any class!

**Disabled Students:** If you have a disability, you are encouraged to contact Disabled Students Programs & Services at 795-6658. Their office is located in Building 3000, adjacent to Parking lot 3C. They will help you determine what assistance is available for you. Any student requiring special assistance due to a disability must discuss what is needed with me by the second week of semester. <http://www.miracosta.edu/student-services/dsps/index.html>

**AB 540 & DACA Students:** Access information about resources for AB 540, DACA, Undocumented and Mixed Status Students such as application procedures and the on-campus UndocuAlly program. <https://www.miracosta.edu/student-services/admissions/ab540.html>

**Videos:** Please go to [www.yourmathgal.com](http://www.yourmathgal.com) for math videos related to this course.



## STUDENT RESOURCES

**LGBTQIA Safe Space Program:** MiraCosta College has an expressed commitment to equity and inclusion for students, faculty, and staff members who are lesbian, gay, bisexual, transgender, queer, questioning, intersex, and asexual. The district employs a Campus Liaison for LGBTQIA+ Needs, offers [LGBTQIA Safe Space](#) training, and has multiple student scholarships for members and active allies of the LGBTQIA+ community. For information about these and additional campus resources and services visit [miracosta.edu/lgbt](http://miracosta.edu/lgbt) or contact the campus liaison for LGBTQI needs at 760-795-6460.

**Veteran Services:** The Veterans Education Office, located in Building 3300, provides assistance to veterans and dependents wishing to use their educational benefits at MiraCosta College.

The Veterans Information Center, located in Building T-100, provides a place for students to find resources on VA educational benefits, MiraCosta Student Services, and community organizations that are dedicated to assisting veterans. The center also provides a place for students to relax, study, and meet with friends. The Veteran Peer Advisors are also available. Resources are available on a variety of issues, including employment, counseling, housing, and healthcare.

Oceanside Campus <http://www.miracosta.edu/student-services/veterans-services/index.html>  
3300 Building: P 760.757.2121 x6285  
T100 Building: P 760.757.2121 x6981

**Counseling Services:** The Counseling Center offers individualized academic, career, and personal counseling to assist both prospective and current students in developing their educational programs, coordinating their career and academic goals, and understanding graduation, major, certificate, and transfer requirements. Students can use online resources (<http://www.miracosta.cc.ca.us/student-services/counseling/index.html>) for general questions and visit or call the office for appointments and drop-in times:

<b>Oceanside Campus</b>	<b>San Elijo Campus</b>
Building 3700 (Parking lot 3C)	Administration Building
Phone: 760-795-6670	Phone: 760-634-7811
Fax: 760-795-6663	Fax: 760-634-7875

**Wonderful, Free, Available Resources:** There are many free resources available for you on campus to assist you with your education:

- [Food pantry](#) [Health Services](#) [Textbook loan program](#)

**Wonderful, Supportive Clubs and/or Organizations:** Joining a [club](#) or organization is a fun and instrumental part of your college education. Here are some of the clubs and organizations to check out:

- [Puente](#) [Umoja](#) [RAFFY](#) (Former Foster Youth) and many more

## CLASS POLICIES

**Drops:** If you decide to drop the course, use SURF to drop yourself. You will not be dropped automatically

### **Grade/Repeating Course**

**Issue:** The state has decided to limit students with more than 3 grades of D, F, NP, or W. Grades prior to summer 2012 will be included in the count. You need to be extremely careful with these and make the big decision about dropping the course very early (see the drop deadline).

**Make-up Exams:** You must take the test on the day of scheduled test. If for any reason, you must miss class on the day of a quiz or exam, you **MUST** make arrangements with me **IN ADVANCE** for taking the test at some other time.

### **Cheating Policy and Classroom Behavior:**

A student found in violation may receive a failing grade on that assignment, and will have this infraction reported to the college. I do not tolerate academic dishonesty in any form. MiraCosta College requires reporting of ALL instances of academic dishonesty as Academic Integrity Violations. These include:

- looking at another person's exam during a testing situation
- bringing in and using notes or supplemental materials on quizzes and exams when none are allowed
- Allowing another student to copy your work and submit it.

**Curving of Tests and Course Grades:** I do not curve exams based on a high or low average and I do not give an incomplete grade.

All students must conduct themselves in a respectful manner towards the other students, and towards the instructor. Disrespectful language or disruptive behavior can result in the temporary or permanent removal of the student from class.

**ATTENDANCE:** You are expected to attend class and to participate. If you are tardy, please come in quietly, and tell me during the break why you are late. Otherwise, you will be marked absent. If you need to leave early, please tell me why before class starts and leave quietly. Since attendance is mandatory, you will be dropped after the fourth unexcused absences.

## TENTATIVE SCHEUDLE

Day	Date	Activities
Monday	August 20	<ul style="list-style-type: none"> <li>Syllabus activity</li> <li><b>CONCEPT 1:</b> Solving linear equations including equations with no solution.</li> </ul>
Tuesday	August 21	<ul style="list-style-type: none"> <li>Hands-on Activity on Concept 1</li> <li><b>CONCEPT 2:</b> Solving absolute value equations. 2.7</li> </ul>
Wednesday	August 22	<ul style="list-style-type: none"> <li>Hands-on Activity on Concept 2</li> </ul>
Thursday	August 23	<ul style="list-style-type: none"> <li><b>CONCEPT 3:</b> Solving and graphing linear inequalities in one variable. 2.5</li> </ul>
Monday	August 27	<ul style="list-style-type: none"> <li><b>CONCEPT 4:</b> Solving compound inequalities. 2.6</li> </ul>
Tuesday	August 28	<ul style="list-style-type: none"> <li><b>CONCEPT 5:</b> Absolute value inequalities and interval notation for the solution set. 2.7</li> </ul>
Wednesday	August 29	<ul style="list-style-type: none"> <li>Hands-on Activity on Concept 5</li> </ul>
Thursday	August 30	<ul style="list-style-type: none"> <li><b>Quiz 1 on concept 2 &amp; 5</b></li> <li><b>CONCEPT 6:</b> Factoring polynomials (day 1)</li> </ul>
Monday	September 3	<b>Holiday (Labor Day)</b>
Tuesday	September 4	<ul style="list-style-type: none"> <li><b>CONCEPT 6:</b> Factoring polynomials (day 2)</li> </ul>
Wednesday	September 5	<ul style="list-style-type: none"> <li><b>CONCEPT 7:</b> Solving quadratic equations by factoring.</li> </ul>
Thursday	September 6	<ul style="list-style-type: none"> <li>Hands-on Activity on Concept 7</li> </ul>
Monday	September 10	<ul style="list-style-type: none"> <li><b>CONCEPT 8:</b> Solving quadratic inequalities by factoring and interval notation</li> </ul>
Tuesday	September 11	<ul style="list-style-type: none"> <li><b>CONCEPT 9:</b> Addition &amp; subtraction with rational expressions</li> </ul>

## TENTATIVE SCHEUDLE

Day	Date	Activities
Wednesday	September 12	<ul style="list-style-type: none"> <li>• <b>CONCEPT 10:</b> Solving rational inequalities.</li> </ul>
Thursday	September 13	<b>Quiz 2 on concepts 6-10</b>
Monday	September 17	<ul style="list-style-type: none"> <li>• <b>CONCEPT 11:</b> Functions, functional notation, and evaluating a function. 3.5</li> </ul>
Tuesday	September 18	<ul style="list-style-type: none"> <li>• <b>CONCEPT 12:</b> graphing and forming linear equations given a slope and a point, two points</li> <li>• Hands-on Activity on Concept 12</li> </ul>
Wednesday	September 19	<ul style="list-style-type: none"> <li>• <b>CONCEPT 13:</b> Linear Functions. 3.6</li> </ul>
Thursday	September 20	<ul style="list-style-type: none"> <li>• <b>CONCEPT 14:</b> Graph of a function and domain and range in interval notation. 3.6</li> </ul>
Monday	September 24	<ul style="list-style-type: none"> <li>• <b>CONCEPT 15:</b> The algebra of functions and composite functions, (and some applications). 10.1</li> </ul>
Tuesday	September 25	<ul style="list-style-type: none"> <li>• <b>CONCEPT 16:</b> Inverse functions and their graphs (day 1). 10.1</li> </ul>
Wednesday	September 26	<ul style="list-style-type: none"> <li>• <b>CONCEPT 16:</b> Inverse functions and their graphs (day 2). 10.1</li> </ul>
Thursday	September 27	<b>Review</b>
Monday	October 1	<b>Exam 1</b>
Tuesday	October 2	<ul style="list-style-type: none"> <li>• <b>CONCEPT 17:</b> Radical expressions. 8.1, 8.2</li> </ul>
Wednesday	October 3	<ul style="list-style-type: none"> <li>• <b>CONCEPT 18;</b> Radical functions &amp; their domain. 8.7</li> </ul>



## TENTATIVE SCHEUDLE

Day	Date	Activities
Thursday	October 4	<ul style="list-style-type: none"> <li>• <b>CONCEPT 19:</b> Properties of exponents. 8.3</li> </ul>
Monday	October 8	<ul style="list-style-type: none"> <li>• <b>CONCEPT 20:</b> Rational exponents. 8.3</li> <li>• Hands-on Activity on Concept 1 and 4</li> </ul>
Tuesday	October 9	<ul style="list-style-type: none"> <li>• <b>CONCEPT 21:</b> Simplifying &amp; multiplying radical expressions. 8.5</li> </ul>
Wednesday	October 10	<ul style="list-style-type: none"> <li>• <b>CONCEPT 22:</b> Dividing &amp; rationalizing radical expressions. 8.5</li> </ul>
Thursday	October 11	<ul style="list-style-type: none"> <li>• <b>CONCEPT 23:</b> Simplifying algebraic expressions.</li> <li>• <b>CONCEPT 24:</b> Addition and subtraction of radical expressions. 8.4</li> </ul>
Monday	October 15	<ul style="list-style-type: none"> <li>• Hands- on Activity on Concept 24</li> </ul>
Tuesday	October 16	<ul style="list-style-type: none"> <li>• <b>CONCEPT 25:</b> Solving radical equations (day 1). 8.6</li> </ul>
Wednesday	October 17	<ul style="list-style-type: none"> <li>• <b>CONCEPT 26:</b> Solving radical equations (day 2). 8.6</li> </ul>
Thursday	October 18	<ul style="list-style-type: none"> <li>• <b>CONCEPT 27:</b> Complex numbers. 8.8</li> </ul>
Monday	October 22	<b>Quiz 3 on concepts 17-27</b>
Tuesday	October 23	<ul style="list-style-type: none"> <li>• <b>CONCEPT 28:</b> The square root property. 9.1</li> </ul>
Wednesday	October 24	<ul style="list-style-type: none"> <li>• <b>CONCEPT 29:</b> Completing the square. 9.2</li> </ul>
Thursday	October 25	<ul style="list-style-type: none"> <li>• Hands-on Activity on Concept 29</li> <li>• <b>CONCEPT 30:</b> The quadratic formula. 9.3</li> </ul>

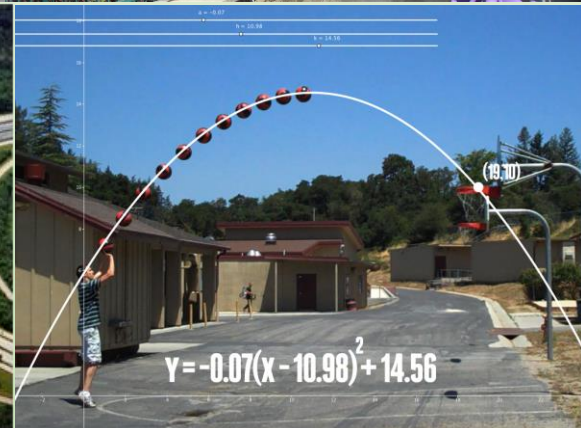
## TENTATIVE SCHEUDLE

Day	Date	Activities
Monday	October 29	<ul style="list-style-type: none"> <li>Solving quadratic equations in quadratic form. 9.4</li> </ul>
Tuesday	October 30	<ul style="list-style-type: none"> <li><b>CONCEPT 31:</b> Quadratic functions and their graphs with application (day 1). 9.5</li> </ul>
Wednesday	October 31	<ul style="list-style-type: none"> <li><b>CONCEPT 32:</b> Quadratic functions and their graphs with application (day 2). 9.6</li> </ul>
Thursday	November 1	<b>Review</b>
Monday	November 5	<b>Exam 2</b>
Tuesday	November 6	<ul style="list-style-type: none"> <li><b>CONCEPT 33:</b> Exponential functions. 10.2</li> </ul>
Wednesday	November 7	<ul style="list-style-type: none"> <li><b>CONCEPT 34:</b> Compound Interest. 10.2</li> </ul>
Thursday	November 8	<ul style="list-style-type: none"> <li><b>CONCEPT 35:</b> Logarithmic functions. 10.3</li> </ul>
Monday	November 12	<b>Holiday (Veterans Day)</b>
Tuesday	November 13	<ul style="list-style-type: none"> <li><b>CONCEPT 36:</b> Exponential properties. 10.4</li> </ul>
Wednesday	November 14	<ul style="list-style-type: none"> <li><b>CONCEPT 37:</b> Logarithmic properties. 10.4</li> </ul>
Thursday	November 15	<ul style="list-style-type: none"> <li><b>CONCEPT 38:</b> Solving exponential equations. 10.5</li> </ul>
Monday	November 19	<ul style="list-style-type: none"> <li><b>CONCEPT 39:</b> Solving logarithmic equations including using properties. 10.5</li> </ul>
Tuesday	November 20	<ul style="list-style-type: none"> <li>Hands-on Activity on Concepts 39 and 39</li> </ul>
Wednesday	November 21	<ul style="list-style-type: none"> <li><b>CONCEPT 40:</b> Applications of logarithmic and exponential functions. 10.5</li> </ul>
Thursday	November 22	<b>Holiday (Thanksgiving)</b>
Monday	November 26	<b>Quiz 4 on concepts 33-40</b>
Tuesday	November 27	<ul style="list-style-type: none"> <li><b>CONCEPT 41:</b> Equation of circles (day 1). 11.1</li> </ul>

## TENTATIVE SCHEUDLE

Day	Date	Activities
Wednesday	November 28	<ul style="list-style-type: none"> <li>• <b>CONCEPT 42:</b> Equation of circles (day 2). 11.1</li> </ul>
Thursday	November 29	<ul style="list-style-type: none"> <li>• <b>CONCEPT 42:</b> Solving system of linear equations</li> </ul>
Monday	December 3	<ul style="list-style-type: none"> <li>• <b>CONCEPT 43:</b> Solving system of non-linear equations. 11.5</li> </ul>
Tuesday	December 4	<b>Review</b>
Wednesday	December 5	<b>Review</b>
Thursday	December 6	<b>Review</b>
Monday	December 10	<b>Final exam</b>

### Real Life Applications of Mathematics



## Homework Assignment

### Intermediate Algebra by OpenStax

Section	Page	Problems
2.5	183	297-345 every other odd, 347, 351, 355, 357, 363
2.6	195	377-425 every other odd
2.7	208	435-493 every other odd
3.5	325	283-331 every other odd
3.6	343	337-385 every other odd
8.1	755	1-49 every other odd
8.2	771	55-113 every other odd
8.3	786	119-161 every other odd
8.4	797	165-239 every other odd
8.5	810	245-281 every other odd
8.6	824	287-345 every other odd
8.7	832	351-403 every other odd
8.8	844	409-475 every other odd
9.1	869	1-67 every other odd
9.2	885	71-109 every other odd
9.3	898	113-151 every other odd
9.4	906	155-191 every other odd
9.5	919	195-217 odd
9.6	944	229-283 every other odd
10.1	1002	1-61 every other odd
10.2	1018	65-117 every other odd
10.3	1033	126-207 every other odd
10.4	1044	218-283 every other odd
10.5	1054	288-347 every other odd
11.1	1082	1-47 every other odd
11.5	1147	188-235 odd