

## Course Information

Math 10 Numbers, Relations & Functions

Mr. A Jones

**Materials:** Each student should have a 3-ring binder or Duotang, a pencil, paper and a scientific calculator in class daily. All work must be done in pencil.

**Teacher Expectations:** Have a positive attitude, a willingness to learn, and exhibit proper classroom behavior. Complete your work, hand it in on time, and attend extra help if you are not confident in what you are doing. When in class, you have to be working on math.

**Course Mapping:** We will work on topics in Chapters: 3, 4, 5, 6, and 7 in Foundations and Pre-Calculus Mathematics 10.

### **Classroom Rules and Procedures:**

- 1) Be in the classroom when the bell sounds.
- 2) Complete the warm-up assignment that is on the board without being told to do so
- 3) Only one person speaks at a time.
- 4) Put drinks in the appropriate location (near the door).
- 5) Respect the teacher, your classmates, and respect yourself.
- 6) Don't use cell phones in class time
- 7) It is the student's responsibility to get caught up when absent

**Tests:** All tests will be announced. If you are away, make-up on your own time before they are returned to other students.

**Quizzes:** A quiz may be announced or unannounced and may be given at any time. No make-ups if absent (not penalized)

### **Grading:**

ATTRIBUTE	WEIGHT	PERCENT
Prime Factori... 	15	15%
Exponents 	15	15%
Exam 	25	25%
Functions an... 	15	15%
Polynomials 	15	15%
Observations 	15	15%

**Extra Help Sessions:** Tuesday and Thursday after school.

**Re-Testing:** Any student that makes below 60% on a common unit test will be required to attend a mandatory extra-help sessions (60 minutes) before the re-test.

### **Exam Exemptions:**

You can earn 1 exam exemption per semester by either:

- Maintaining an 85% average, all major assignments complete and be passing all courses.
- Or, missing 5 or less unexcused days (2 lates is an absence) and be passing all courses. Excuses have to be submitted within 5 days of absence.

**Attendance:** Attendance is very important! These are the guidelines for any student missing...

- 5 days for any reason (except extra-curricular): phone call home
- 10 days: letter home and students must start to “buy back days”
- 12 days: case conference with parents
- 15 days: letter to remind parents that at 20 days the credit may be revoked
- 20 days: ESS meeting to determine if credit will be revoked

## Outcomes:

- AN1: Demonstrate an understanding of factors of whole numbers by determining the: prime factors, greatest common factor, least common multiple, square root, cube root.
- AN2: Demonstrate an understanding of irrational numbers by: representing, identifying, simplifying and ordering irrational numbers.
- AN3: Demonstrate an understanding of powers with integral and rational components.
- AN4: Demonstrate an understanding of the multiplication of polynomial expressions (limited to monomials, binomials and trinomials) concretely, pictorially and symbolically.
- AN5: Demonstrate an understanding of common factors and trinomial factoring, concretely, pictorially and symbolically.
- RF1: Interpret and explain the relationships among data, graphs and situations
- RF2: Demonstrate an understanding of relations and functions
- RF3: Demonstrate an understanding of slope with respect to: rise and run; line segments and lines; rate of change; parallel lines and perpendicular lines
- RF4: Describe and represent linear relations, using words; ordered pairs; tables of values; graphs; and equations.
- RF5: Determine the characteristics of the graphs of linear relations, including the: intercepts, slope, domain and range.
- RF6: Relate linear relations expressed in: slope-intercept form ( $y = mx + b$ ); general form ( $Ax + By + C = 0$ ); and slope-point form ( $y - y_1 = m(x - x_1)$ ) to their graphs
- RF7: Determine the equation of a linear relation given: a graph, a point and the slope; two points; or a point and the equation of a parallel or perpendicular line; a scatterplot
- RF8: Solve problems that involve the distance between two points and the midpoint of a line segment
- RF9: Represent a linear function using function notation
- RF10: Solve problems that involve systems of linear equations in two variables, graphically and algebraically