# Honors PreCalculus Summer Review

**TO:** All 2018-2019 Honors PreCalculus Students

**FROM:** Honors PreCalculus Teachers

We are pleased that you have chosen to continue your math sequence by enrolling in Honors Pre-Calculus for next year. To help ensure your success in Honors Pre-Calculus next year, we have created Khan Academy summer review work. This review contains material that you must have knowledge of on the 1st day of the course. The review has problems from Integrated 1, Integrated 2, and Integrated 3.

## YOU MUST SIGN UP AT KHAN ACADEMY ([www.khanacademy.org](www.khanacademy.org))

The packet has been divided into the following categories:

| | | |
|---|---|---|
| Linear Equations | Quadratics | Rational Expressions |
| Solving Linear Equations | Domain & Range | Right Triangle Trigonometry |
| Linear Systems | Operations with Exponents | Trigonometric Functions |

Helpful hints to completing the summer work over the summer:

- Log into Khan Academy when completing the problems -- if you don't log in you won't get credit for your work.
- Do a little of the summer work each day – you are not expected to complete it all in one day
- Make sure to use scratch paper for multi-step problems and the TI-Nspire calculator
- Pace yourself, plan to do a portion each week.
- Other resources you may want to use:
    - your Integrated 1, Integrated 2, and Integrated 3 notes.
    - purplemath.com
    - mathforum.org
    - Wolframalpha.com
    - mathguide.com

*Honors Pre-Calculus Supplies Needed:*
- Pencils/Erasers
- Binder/Notebook
- Paper
- Graphing Calculator–It is recommended that you have a graphing calculator every day in class and at home. If you don't already have a TI-83, TI-84, or TI-Nspire and are going to purchase a graphing calculator, we recommend the TI-Nspire CX which will be used extensively in class.

# Honors Pre-Calculus Summer Review

These problems are a review of information you learned in Integrated Math 1, Integrated Math 2, and Integrated Math 3. You need to know this information to be successful in Pre-Calculus. Therefore, this packet is due on August 10, 2018 **BEFORE THE FIRST DAY IN PRE-CALCULUS**.

Your work must be completed on August 10, 2018 **BEFORE THE FIRST DAY IN PRE-CALCULUS**. Failure to complete these quizzes and problems on August 10, 2018 **BEFORE THE FIRST DAY IN PRE-CALCULUS** may jeopardize your ability to remain in the course.

## LINEAR EQUATIONS

- ❖ https://www.khanacademy.org/math/algebra/two-var-linear-equations/modal/quiz/writing-slope-intercept-equations-quiz
- ❖ https://www.khanacademy.org/math/algebra/two-var-linear-equations/modal/quiz/forms-of-two-var-linear-equations-quiz

## SOLVING LINEAR EQUATIONS

- ❖ https://www.khanacademy.org/math/algebra/one-variable-linear-equations/modal/e/linear_equations_3
- ❖ https://www.khanacademy.org/math/algebra/one-variable-linear-equations/modal/e/multistep_equations_with_distribution

## LINEAR SYSTEMS

- ❖ https://www.khanacademy.org/math/algebra/systems-of-linear-equations/modal/quiz/systems-of-linear-equations-word-problems-quiz

## QUADRATICS

- ❖ https://www.khanacademy.org/math/algebra/quadratics/modal/e/solving_quadratics_by_factoring_2

## DOMAIN & RANGE

- ❖ https://www.khanacademy.org/math/algebra/algebra-functions/modal/e/domain-of-algebraic-functions
- ❖ https://www.khanacademy.org/math/algebra/algebra-functions/modal/e/domain_and_range_0.5

## OPERATIONS WITH EXPONENTS

- ❖ https://www.khanacademy.org/math/algebra/rational-exponents-and-radicals/modal/quiz/rational-exponents-and-the-properties-of-exponents-quiz
- ❖ https://www.khanacademy.org/math/algebra/rational-exponents-and-radicals/modal/e/multiplying_radicals

## RATIONAL EXPRESSIONS

- ❖ https://www.khanacademy.org/math/algebra2/rational-expressions-equations-and-functions/modal/e/simplifying_rational_expressions_1
- ❖ https://www.khanacademy.org/math/algebra2/rational-expressions-equations-and-functions/modal/e/adding_and_subtracting_rational_expressions_2
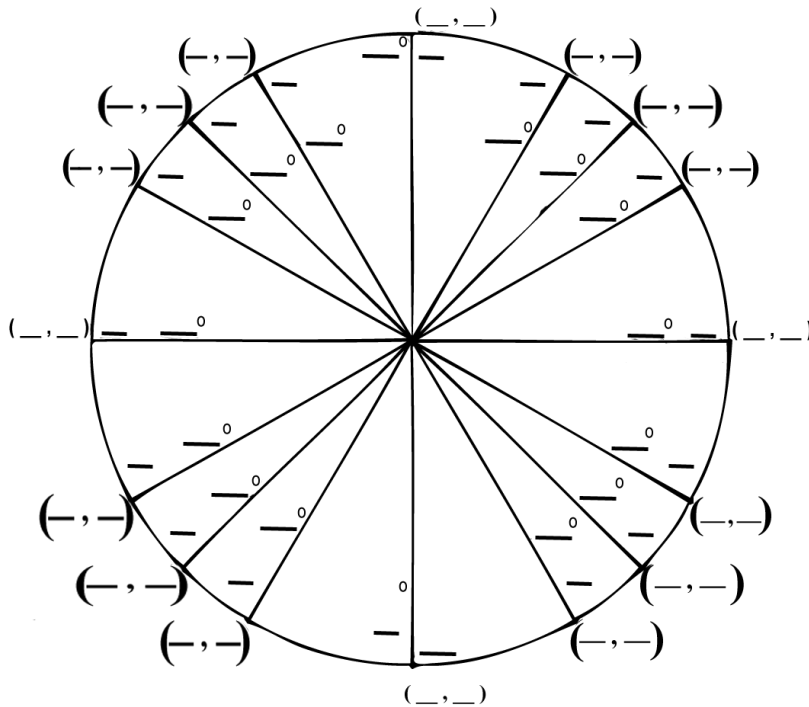
# RIGHT TRIANGLE TRIGONOMETRY

- https://www.khanacademy.org/math/trigonometry/trigonometry-right-triangles/modal/test/trigonometry-right-triangles-unit-test

# TRIGONOMETRIC FUNCTIONS

(For fun: http://www.mathwarehouse.com/unit-circle/unit-circle-game.php)

- https://www.khanacademy.org/math/trigonometry/unit-circle-trig-func/modal/test/unit-circle-trig-func-unit-test

- **Without any aids, fill in the Unit Circle.**

- **Watch this video:** https://www.khanacademy.org/math/trigonometry/unit-circle-trig-func/modal/v/unit-circle-definition-of-trig-functions-1

## Pre-Calculus Summer Review Rubric

|  | 5 | 4 | 3 | 2 | 1 | 0 |
|---|---|---|---|---|---|---|
| **Summer Review** | Completed all topics on-time with 100% success on topics | Completed all topics on-time with 90-99% success on topics | Completed all topics on-time with 80-89% success on topics | Completed all topics on-time with 70-79% success on topics | Completed all topics on-time with 60-69% success on topics | Not completed on-time OR missing topics OR less than 60% success on topics |