

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

**PRECALCULUS**  
**QUARTER FOUR PROJECT – DESCRIPTION AND GRADING SHEET**

**Assignment:** Create an **original, informative, and eye-catching** pamphlet that describes and demonstrates how to graph a rational function. Your audience is an Algebra 2 student who just finished learning rational expressions. This pamphlet must include both the algebraic or shortcut methods, as well as a worked-out example on how to find each of the following for a rational function:  
the domain, x-intercepts, y-intercepts, vertical asymptotes, horizontal asymptotes (all different situations), slant asymptotes, and holes

The project is worth twenty (25) points in the performance assessment category. The points will be broken down as outlined below. Refer to <https://www.youtube.com/watch?v=21qi9ZcQVto> for a tutorial on how to make an eight page foldable pamphlet.

\_\_\_\_ (1 pt.) The pamphlet **must** be made on one 8.5" x 11" paper and include the following:

\_\_\_\_ (1 pt.) **1.** a front cover for the pamphlet,

\_\_\_\_ (2 pt.) **2.** a section with an accurate description and example on how to find the *domain*,

\_\_\_\_ (2 pt.) **3.** a section with an accurate description and example on how to find the *holes*,

\_\_\_\_ (2 pt.) **4.** a section with an accurate description and example on how to find the *vertical asymptotes*,

\_\_\_\_ (3 pt.) **5.** a section with an accurate description and example on how to find the *horizontal asymptotes*,

\_\_\_\_ (2 pt.) **6.** a section with an accurate description and example on how to find the *slant asymptotes*,

\_\_\_\_ (2 pt.) **7.** a section with an accurate description and example on how to find the *x-intercepts*,

\_\_\_\_ (2 pt.) **8.** a section with an accurate description and example on how to find the *y-intercepts*.

\_\_\_\_ (2 pt.) **9.** a worked-out example from beginning to end of a rational function that includes a hole, vertical asymptote, and horizontal asymptote. (Be sure to identify all intercepts and the domain!)

\_\_\_\_ (4 pt.) Presentation, Neatness, Originality & Creativity (*use of color might be helpful*). (*No erasures. A final copy.*)

\_\_\_\_ (1 pt.) Your name and class period on the bottom of the front side of the pamphlet.

\_\_\_\_ (1 pt.) This grading sheet **must** be turned in with the project.

**Total \_\_\_\_\_/25 points**

The project is due on Tuesday, May 21, 2019. Appropriate deductions will be taken for incompleteness, not following directions, poor presentation, and lateness (10% = 2.5 points per day, as per school policy). No projects will be accepted after Thursday, May 23, 2019.