

AP Calculus Review Worksheet

This packet is a review of the entering objectives for AP Calculus and is due on the first day back to school. It is to be done neatly and on a separate sheet of paper. Have a great summer!

I. Simplifying Rational Expressions

Simplify. (Show your work!)

1.  $\frac{x-4}{x^2-3x-4}$

2.  $\frac{x^3-8}{x-2}$

3.  $\frac{5-x}{x^2-25}$

4.  $\frac{x^2-4x-32}{x^2-16}$

II. Trigonometric Identities

1. Pythagorean Identities \_\_\_\_\_

2.  $\cos 2x =$  \_\_\_\_\_

3.  $\sin 2x =$  \_\_\_\_\_

III. Operations with Rational Expressions

1.  $\frac{1}{x+h} - \frac{1}{x}$

2.  $\frac{\frac{2}{x^2}}{\frac{10}{x^5}}$