GN_Double and Half Angle Identities   **Analysis**   Name_____
                                                          Date_____

Double-Angle Formulas:

$sin2\theta =$ $cos2\theta =$

$tan2\theta =$

Half-Angle Formulas:

$sin\frac{\alpha}{2} =$ $cos\frac{\alpha}{2} =$

$tan\frac{\alpha}{2} =$

A. Find the exact value of each trig ratio by rewriting the angle as half of a special angle.

1. $sin195°$ 2. $cos165°$ 3. $tan\frac{9}{8}\pi$

B. Given: $sinA = -\frac{3}{5}$, $\pi < A < \frac{3}{2}\pi$ and $cos B = -\frac{12}{13}$, $\frac{\pi}{2} < B < \pi$

Set up a triangle in the correct quadrant for angle A and angle B. Use the triangle to find each value.

    Angle A   Angle B

4. $cos2B$ 5. $cos\frac{A}{2}$