Assignment 7

1. Evaluate $\oint_C f(z)dz$, where f is the given function and the contour C is the unit circle $|z| = 1$. (Hint: Theorem 5.4, Example 5.3.1, Example 5.3.2.)

    (a) $f(z) = z^3 - 1 + 3i$

    (b) $f(z) = \frac{z}{2z+3}$

2. Evaluate the given integral along the indicated closed contour C.

    $\oint_C \left(\frac{-3z+2}{z^2-8z+12} \right) dz; \ |z - 5| = 2$

    Notice:

    Please write your Email title as "A{Assignment Number}-{Your Student ID}-{Your Name}".