Assignment 8

1. Consider to use Theorems 5.9 and 5.10, when appropriate, to evaluate the given integral along the indicated closed contour(s).

   (a) $\oint_C \frac{4}{z-3i} dz$; $|z| = 5$

   (b) $\oint_C \frac{z^2}{z^2+4} dz$; $|z - i| = 2$

   (c) $\oint_C \frac{z^2}{z^2+4} dz$; $|z + 2i| = 1$

   Hint:
   Read the examples 5.5.1, 5.5.2, and 5.5.3.

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