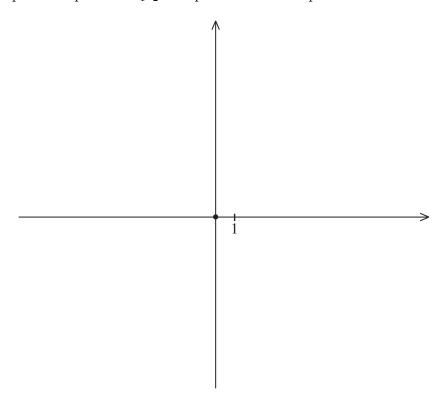
1. Take the complex numbers  $c_1 = -\frac{3}{2} + 2i$  and  $c_2 = 2 - i$ . Place them carefully into the complex plane below. Compute the product  $c_1c_2$  and place it into the plane as well.



**2.** Consider the differential equation y'' + 2y' - 3. Determine the roots of its auxiliary polynomial. Find a solution y = f(x) of the differential equation that satisfies the initial conditions f(0) = 1 and f'(0) = 2.