These are alleged answers. For each error herein, you get extra-credit points for being the first to report it by e-mail.

1. Let $w = 2 - 7i$ and $z = 7 + 2i$. Write the following in standard $a + bi$ form:

   (a) $w + z = 9 - 5i$
   (b) $wz = 28 - 45i$
   (c) $w\overline{w} = 53$
   (d) $w + \overline{w} = 4$
   (e) $w - \overline{w} = -14i$
   (f) $\frac{w}{z} = -i$

2. To solve $x^2 - 4x + 40 = 0$ via the quadratic formula, note first that

$$b^2 - 4ac = (-4)^2 - 4(1)(40) = 16 - 160 = -144 = -12^2,$$

so that

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{4 \pm 12i}{2} = 2 \pm 6i.$$