Perform the indicated operations and write the answer in standard form.

1)

$$\left(2-3i\right)\left(1-i\right)-\left(3-1\right)\left(3+i\right)$$

2)

$$5\sqrt{-16}+3\sqrt{-81}$$

3)

Evaluate $x^{2}-2x+2$ for $x=1+i$

(Hint: Substitute (1+i) in for x )

4)

$$(-2+\sqrt{-3})^{2}$$

5) Solve using the quadratic formula.

$$x^{2}-2x+2=0$$



Solutions To Practice Problems

1) $-11-5i$

2) 0 + 47i or 47i

3) 0

4) $1-4i\sqrt{3}$

5) x= 1+i, 1-i