

## Imaginary and Complex Numbers Practice

Simplify:

$$1) (4 + 2i) + (-3 - 5i)$$

$$2) (-3 + 4i) - (5 + 2i)$$

$$3) (-8 - 7i) - (5 - 4i)$$

$$4) (3 - 2i)(5 + 4i)$$

$$5) (3 - 4i)^2$$

$$6) (3 - 2i)(5 + 4i) - (3 - 4i)^2$$

$$7) \text{ Write } \frac{3+7i}{5-3i} \text{ in standard form}$$

$$8) \text{ Simplify } i^{925}$$

$$9) \text{ Simplify } i^{460}$$

$$10) \text{ Write } \frac{1-4i}{5+2i} \text{ in standard form}$$

$$11) \sqrt{-16}$$

$$12) \sqrt{-8}$$

$$13) \sqrt{-6} \sqrt{-6}$$

$$14) 4 + \sqrt{-25}$$

$$15) \frac{6 - \sqrt{-8}}{-2}$$