

What sets does

$\frac{6}{3}$ belong to?

$$\frac{6}{3} = 2$$

Natural, Whole, Integer, Rational, Real

Property?

$$2(x + 2) = 2x + 4$$

Distributive

Simplify

$$(6 - 4i) - (4 - 3i)$$

$$= 6 - 4i - 4 + 3i$$

$$= \boxed{2 - i}$$

Simplify

$$j^{37} = \boxed{i}$$

$$\frac{37}{4} = 9.25$$

| | | |
|---|-----|-------|
| | i | $.25$ |
| - | 1 | $.50$ |
| - | i | $.75$ |
| | 1 | $.0$ |

Simplify

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

$$= 8 + 12i - 12i - 18i^2$$

$$= 8 - 18(-1)$$

$$= 8 + 18$$

$$= \boxed{26}$$

Evaluate

$$\sqrt{-25}\sqrt{-64}$$

$$= i\sqrt{25} \quad i\sqrt{64}$$

$$= (5i)(8i)$$

$$= 40i^2$$

$$= 40(-1)$$

$$= \boxed{-40}$$

Solve

$$x^2 + 4x = 0$$

$$x(x + 4) = 0$$

$$\boxed{x = 0}$$

$$\begin{array}{r} x + 4 = 0 \\ -4 \quad -4 \\ \hline \end{array}$$

$$\boxed{x = -4}$$

Solve

$$\sqrt{(x+3)^2} = \pm \sqrt{-7}$$

$$x+3 = \pm \sqrt{-7}$$

$$x+3 = \pm i\sqrt{7}$$

-3

-3

$$x = \boxed{-3 \pm i\sqrt{7}}$$