

Topic:

EQ:

Imaginary Numbers - any number written as a real number multiplied by the imaginary unit i which is defined to equal the $\sqrt{-1}$

$$i =$$

$$i^2 =$$

Simplify the radical:

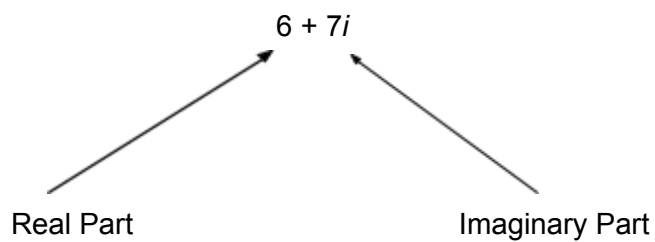
1) $\sqrt{-1}$

2) $\sqrt{-7}$

3) $\sqrt{-25}$

4) $2\sqrt{-5}$

Complex Numbers - any number with a real part and an imaginary part



Let's add/subtract them.

1) $(-3 + 9i) + (3 + 9i)$

2) $(12 + 5i) - (2 - i)$

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

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

Time to multiply and find the product!

**Remember $i * i = -1$

$$1) (7i)(3i)$$

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

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

$$4) (5i)(-6i)$$

$$5) (-2i)(6 - 3i)$$

$$6) (9 - 4i)(7 - i)$$

$$7) (1 + 2i)(2 - 6i)(3 - 9i)$$

Summary: