

Equivalent Complex Numbers Class Work

🦋 **Objective:** You will be able to determine values that satisfy equivalent complex expressions.

★ **Consider the expression:**

$$4xi - 5 = y - 16i.$$

Think-Write-Pair-Share

How could you determine the values of x and y?

Practice: Determine the values of the variables in each expression.

1. $1 + 3ri = 5ri - 8 + 2i + 4s$

2. $2w - 8i + 1 = -3 - 64vi$

3. $(i + 5)^2 + n = 10i - 9$

4. $m + (i - 3)^2 = -3(2i - 4)$

5. $9yi - 7 = 45i + 3x - i^2$

6. $4 - i^2 + 25hi = -\frac{1}{2}k - 100i$

7. $(2 + bi)(2 - bi) = -4$; challenge ☺

Create an acrostic poem in which each letter represents a phrase related to something you have learned about complex numbers.

I

M

A

G

I

N

E