

**Simplifying Complex Numbers - Independent Practice Worksheet**

Complete all the problems. Make sure to draw out the numbers to help you solve the problems.

1.  $\sqrt{-36}$

2.  $i^7$

11. Go to Mr. Lemon's website and find Secondary 2H then find Nov. ~~21~~ and look at some of the links that discuss complex and imaginary numbers.

3.  $\sqrt{-121} + \sqrt{144}$

Explain two applications of imaginary numbers.  
At least

4.  $\sqrt{49} + \sqrt{-9}$

5.  $\sqrt{-16} + \sqrt{25}$

6.  $i^4$

7.  $i^8$

8.  $\sqrt{-64}$

9.  $\sqrt{-100}$

10.  $\sqrt{-169}$



Name \_\_\_\_\_

Date \_\_\_\_\_

**Simplifying Complex Numbers - Matching Worksheet**

Write the letter of the answer that matches the problem.

\_\_\_\_\_ 1.  $\sqrt{-196}$

a.  $i$

\_\_\_\_\_ 2.  $i^6$

b.  $\sqrt{8}i$

\_\_\_\_\_ 3.  $i^5$

c.  $\sqrt{24} + 2i$

\_\_\_\_\_ 4.  $i^3$

d.  $3 + 5i$

\_\_\_\_\_ 5.  $\sqrt{-8}$

e.  $14i$

\_\_\_\_\_ 6.  $\sqrt{-49}$

f.  $-1$

\_\_\_\_\_ 7.  $\sqrt{24} + \sqrt{-4}$

g.  $1$

\_\_\_\_\_ 8.  $\sqrt{64} + \sqrt{-16}$

h.  $7i$

\_\_\_\_\_ 9.  $\sqrt{9} + \sqrt{-25}$

i.  $8 + 4i$

\_\_\_\_\_ 10.  $\sqrt{-36} + \sqrt{9}$

j.  $6i + 9$

