

Algebra 2  
HW #1 Simplifying Imaginary Numbers

Name: \_\_\_\_\_

In 1 – 24, express each number in terms of  $i$ , and simplify.

1.  $\sqrt{-36}$

2.  $\sqrt{-100}$

3.  $-\sqrt{-81}$

4.  $2\sqrt{-49}$

5.  $\frac{1}{8}\sqrt{-64}$

6.  $-\frac{2}{3}\sqrt{-9}$

7.  $\frac{3}{4}\sqrt{-144}$

8.  $\frac{1}{3}\sqrt{-25}$

9.  $\sqrt{-\frac{1}{4}}$

10.  $\sqrt{-\frac{16}{25}}$

11.  $4\sqrt{-\frac{49}{64}}$

12.  $\frac{3}{5}\sqrt{-\frac{100}{9}}$

13.  $\sqrt{-3}$

14.  $\sqrt{-29}$

15.  $3\sqrt{-11}$

16.  $-\sqrt{-10}$

17.  $\sqrt{-20}$

18.  $-\sqrt{-28}$

19.  $2\sqrt{-75}$

20.  $5\sqrt{-8}$

21.  $\frac{2}{3}\sqrt{-72}$

22.  $-\frac{1}{2}\sqrt{-300}$

23.  $-\sqrt{-\frac{1}{3}}$

24.  $4\sqrt{-\frac{1}{8}}$