Honors Algebra II Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

LT 8-2: Complex Numbers Day 1 Period\_\_\_\_

**Simplify.**

1) $2\sqrt{12}∙4\sqrt{6}$ 2) $-2\sqrt{5}∙5\sqrt{10}∙8\sqrt{2}$

3) $\sqrt{-4}∙\sqrt{-8}$ 4) $\sqrt{-24}∙\sqrt{10}$

5) $2i\sqrt{-100}$ 6) $-3i\sqrt{-3}∙4\sqrt{-15}$

7) $i^{17}$ 8) $i^{38}$ 9) $5i^{87}$

10) $-4i^{14}∙i^{6}$ 11) $\left(-3i^{22}\right)^{3}$ 12) $3i^{11}\left(4i^{9}\right)^{2}$

13) $\left(12i^{3}\right)\left(-3i^{45}\right)$ 14) $2i^{5}\sqrt{-16}$

15) $\left(-3i^{9}\right)^{2}\sqrt{-2}∙\sqrt{6}$ 16) $3i^{15}\left(-2i^{7}\right)^{4}∙\frac{1}{2}\sqrt{-3}∙\sqrt{6}$