Algebra 2

Lesson 2.5 Worksheet

Name _____

Block _____ Date _____

Express each number in terms of i.

1. $-5\sqrt{-27}$

2. $3\sqrt{-192}$

Solve a quadratic equation using square roots and imaginary solutions.

3. $3n^2 - 3 = -27$

4. $2m^2 + 4 = -32$

Find the zeros of each function by completing the square.

5. $n^2 + 8n + 68 = 0$

6. $3m^2 - 6m + 87 = 0$

Multiply complex numbers.

7. $(3 + 5i)(-7 - 6i)$

8. $(6 - 4i)^2$

Evaluate each power of i. (Remember $i^2 = -1$)

9. i^{27}

10. i^{13}

11. i^{50}

12. i^{74}