Quadratic Formula 02/29/2012

Student Name:	
Class:	
Date:	
Instructions:	Read each question carefully and select the correct answer.

1. Solve the quadratic equation.

$$x^{2} = -8x - 7 \begin{bmatrix} \frac{A}{B}, \frac{7}{2}, -\frac{2}{B} \\ \frac{B}{2}, \frac{8+4\sqrt{23}}{2}, \frac{-8-4\sqrt{23}}{2} \\ \frac{C}{B}, \frac{8\sqrt{23}}{2}, -8\sqrt{23} \\ \frac{D}{D}, -1, -7 \end{bmatrix}$$

A. A
B. B
C. C
D. D

2. Find the discriminant of the quadratic equation and choose the statement which best describes the solution.

 $10x^2 - 2x + 3 = 0$

- A. The solutions are two distinct imaginary numbers (complex conjugates).
- **B.** The solutions are two distinct real numbers.
- **C.** There is only one real solution.
- **D.** There are no solutions, neither real nor imaginary.
- **3.** Solve the following using the quadratic formula.

$$-2x^{2} + 3x + 4 = 0$$
A. $\frac{-3 + \sqrt{41}}{4}$
B. $\frac{3 \pm \sqrt{41}}{4}$
C. $\frac{-2 \pm \sqrt{41}}{4}$
D. $\frac{2 \pm \sqrt{41}}{4}$

4. Find the discriminant of the quadratic equation and choose the statement which best describes the solution.

 $-2x^2 + 4x + 8 = 0$

- **A.** The solutions are two distinct real numbers.
- **B.** The solutions are two distinct imaginary numbers (complex conjugates).
- **C.** There are no real solutions.
- **D.** There is only one real solution.