

/97

Team Member 1: \_\_\_\_\_ Per: \_\_\_\_\_

Team Member 2: \_\_\_\_\_

## APCS Problem Set 8: `FactorQuadratics` Team Assignment

### 3 Warm-Up: Making Combinations

If all went well, there should be a total of 20 unique combinations of first and last name.

*Teacher's Initials:* \_\_\_\_\_ (10pts)

### 6 Prepare Eclipse

Why can `FactorQuadratic` now successfully create an object of type `QuadraticEqn` even though that class is void of all methods and fields? (5pts)

### 7 Implementing `QuadraticEqn`, Part I

3. As a quick test of the two methods you've written, create a `main()` in `QuadraticEqn` that creates a few quadratic equations and then prints what `toString()` returns. Make sure the printed output matches the values you sent to `setABC()`.

*Teacher's Initials:* \_\_\_\_\_ (10pts)

### 8 Factoring by Hand

→ See the **next page** for 4 factoring problems... (12pts)

### 11 Acceptance

- **GUI Functionality:** Demonstrate your (hopefully) finished product.

*Teacher's Initials:* \_\_\_\_\_ (10pts)

- **Autotester Results:** Download the provided tester class and run it against your `QuadraticEqn` class. Show your teacher the results so that the score may be recorded on your paper form.

*Teacher's Initials and Score:* \_\_\_\_\_ , \_\_\_\_\_ / 50pts.

## 8 Factoring by Hand

1.  $x^2 + 5x + 6$

factors of  $x^2$ :  $1x \times 1x$

factors of 6:  $1 \times 6$   
 $2 \times 3$

$$( \quad ) ( \quad )$$

$$( \quad ) ( \quad )$$

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2.  $x^2 - 6x + 8$

factors of  $x^2$ :

factors of 8:

$$( \quad ) ( \quad )$$

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3.  $12x^2 - 44x + 7$

factors of  $12x^2$ :

factors of 7:

$$( \quad ) ( \quad )$$

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4.  $24x^2 + 198x - 51$

factors of  $24x^2$ :

factors of  $-51$ :

$$( \quad ) ( \quad )$$