

NAME _____

DATE _____

CLASS _____

SAMPLE TEST

1. **SECTION 10.4** Using the discriminant, determine if the quadratic equation has a double root, no real root, or two roots:

$$8x^2 - 7x + 9 = 0$$

2. **SECTION 10.2** Solve by factoring:

$$3x^2 + 14x = 5$$

3. **SECTION 10.4** Solve by the quadratic formula:

$$x^2 - 84 = 5x$$

4. **SECTION 10.1** Write in standard form:

$$\frac{2}{3}x^2 = -\frac{1}{4}x + \frac{3}{8}$$

5. **SECTION 10.3** Solve by completing the square:

$$x^2 - 4x = 3$$

6. **SECTION 10.5** Find a number such that its square minus six times itself equals 7.

ANSWERS

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

