Intermediate Algebra	Name:
Study Guide 16	Class:
Due Date:	Score:

No Work $\Leftrightarrow$ No Points

Use Pencil Only $\Leftrightarrow$ Be Neat & Organized

1. **Solve by the square root method.**

    (a) **(2 points)** $x^2 = 2500$

    (a) —————

    (b) **(3 points)** $(3x - 1)^2 = -4$

    (b) —————

    (c) **(4 points)** $(5x + 2)^2 - 5 = -41$

    (c) —————

2. **Solve by completing the square method.**

    (a) **(3 points)** $x^2 + 8x + 7 = 0$

    (a) —————

(b) (4 points) $3x^2 - 8x + 5 = 0$

(b) _____

(c) (4 points) $2x^2 - 9x - 5 = 0$

(c) _____

3. Solve by using the quadratic formula.

(a) (2 points) $x^2 + 3x - 21 = 0$

(a) _____

(b) (2 points) $2x^2 - 7x + 5 = 0$

(b) _____

(c) **(2 points)** $3x^2 + 10x + 1 = 0$

(c) _____

(d) **(3 points)** $(x-5)(x+3) = -15$

(d) _____

(e) **(3 points)** $(2x-3)(x+5) = 7$

(e) _____

4. **(4 points)** The product of two consecutive integers is 90. Find all such integers.

4. _____

5. **(4 points)** The product of two consecutive odd integers is 63. Find all such integers.

5. _____

6. **(5 points)** Area of a rectangle is 35 square meters. The length of this rectangle is 3 meters shorter than twice its width. Find its dimensions.

6. _____

7. **(5 points)** Two legs of a right triangle are two consecutive even integers while its hypotenuse is 10 inches. Find the measure of both legs.

7. _____