Section 9.6 Worksheet

Name: _____

Without looking at your notes, write down the quadratic formula below:

1.) _____

Write the equation in standard form. Identify the values of a, b, and c.

2.) $4x^2 = 12$

$a =$_____

$b =$_____

$c =$_____

3.) $-3x^2 - 8x = 2$

$a =$_____

$b =$_____

$c =$_____

4.) $x^2 = 10x - 6$

$a =$_____

$b =$_____

$c =$_____

5.) $5x - 4 = 3x^2$

$a =$_____

$b =$_____

$c =$_____

Use the quadratic formula to solve the equation. Round the solutions to the nearest <u>tenth</u>, if necessary.

7.) $x^2 - 8x + 15 = 0$

$a =$_____

$b =$_____

$c =$_____

8.) $2x^2 + 3x - 2 = 0$

$a =$_____

$b =$_____

$c =$_____

9.) $14x + 3 = -9x^2$

$a =$_____

$b =$_____

$c =$_____

10.) $4x^2 - 13x + 3 = 0$

$a =$_____

$b =$_____

$c =$_____

REVIEW:

Evaluate the expression.

11.) $\pm\sqrt{400}$

12.) $-\sqrt{81}$

Solve the equation or write *no real solution*.
Write the solutions as integers, if possible.
Otherwise, write them as radical expressions.

13.) $x^2 + 4 = 16$

14.) $2x^2 - 37 = 35$