

## Alg 2 1.10 Homework

Question 1.

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**Solve the equation by completing the square. State whether the solutions are real or non-real.  
Give your answer in simplest form.**

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

There are two  solutions:  and .

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Question 2.

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Solve the equation by completing the square. State whether the solutions are real or non-real.

$$x^2 + 2x + 7 = 0$$

The two  solutions are  and .

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Question 3.

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**Without solving the equation, state the number of solutions and whether they are real or non-real.**

$$-17x^2 + 4x + 13 = 0$$

The discriminant is .

Because the discriminant is , the equation has .

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Question 4.

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Without solving the equation, enter the number of solutions and whether they are real or non-real.

$$6x^2 - 10x + 9 = 0$$

The discriminant is , so the equation has  (select)  solution(s).

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**Alg 2 1.10 Homework**

Question 5.

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**Solve the equation using the quadratic formula. Enter your answers in simplest form.**

$$2x^2 + 7 = 4x$$

The two solutions are  and .

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