Completing the Square

Name_____ Period:_____ Date:_____

Directions: Use the information given to solve each problem.

1. Which equation completes the square to create an equation equivalent to $x^2 - 6x + 7$ in the form of $(x - p)^2 = q$?

   A. $(x - 3)^2 = 7$
   B. $(x + 3)^2 = 7$
   C. $(x - 3)^2 = 2$
   D. $(x + 3)^2 = -2$

2. Which equation completes the square to create an equation equivalent to $x^2 + 8x + 6$ in the form of $(x - p)^2 = q$?

   A. $(x + 4)^2 = 10$
   B. $(x - 4)^2 = 10$
   C. $(x + 4)^2 = 22$
   D. $(x - 4)^2 = 22$

3. Which equation completes the square to create an equation equivalent to $x^2 - 4x + 5$ in the form of $(x - p)^2 = q$?

   A. $(x - 2)^2 = 1$
   B. $(x + 2)^2 = 1$
   C. $(x - 2)^2 = -1$
   D. $(x + 2)^2 = -1$

4. Which equation completes the square to create an equation equivalent to $x^2 + 12x + 20$ in the form of $(x - p)^2 = q$?

   A. $(x + 6)^2 = 4$
   B. $(x - 6)^2 = 4$
   C. $(x + 6)^2 = 16$
   D. $(x - 6)^2 = 16$

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Answer Key

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   A

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   C