Chapter 1 review

6. Solve the following quadratics by

 a. factoring

 a.  b.  c. 

 b. completing the square

 a.  b.  c. 

 c. extracting square roots

 a.  b. 

 d. quadratic formula

 a.  b. 

7. Use the position equation to write an equation modeling the flight of a fire work that is shot straight up into the ground from a table that is 3. 5 feet in the air. The initial velocity of the fire work is 45 feet per second.

 a. Write an equation modeling the situation.

 b. How high is the fire work after 2.5 seconds?

 c. How long until the firework hits the ground?

8. Use the discriminant to determine the number of real solutions of the quadratic equations.

 a.  b. 

9. Perform the indicated operations and write the result in standard form.

 a.  b.  c. 

 d.  e. f. 

10. Solve the following quadratics with complex solutions.

 a.  b.  c. 

11. Solve the following polynomials for *x* using the method indicated.

 a. factoring out common terms and then solving

 a.  b. 

 b. factoring (may use u substitution)

 a.  b. 

 c. factor by grouping

 a.  b. 

12. Solve the following radical expressions. Remember to include a check in your solution.

 a.  b. 

13. Solve the following absolute value expressions. Remember to include a check of your solution if there is a quadratic.

 a.  b.  c. 

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 a.  b. 

13. Solve the following absolute value expressions. Remember to include a check of your solution if there is a quadratic.

 a.  b.  c. 