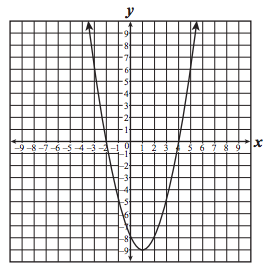
**Solving Quadratic Equations Test – Part 1**

**DO NOT WRITE ON THIS TEST**

**Write the letter of the choice that best completes the statement or answers the question on your answer sheet. (4 points each)**

1. The graph of a quadratic function is shown below.



Which appears to be the solution set for this function?

A. C.

B. D.

2. Which shows the polynomial factored completely?

A.

B.

C.

D.

3. Which of the following statements justifies that is NOT prime over the set of rational numbers?

A. factored gives

B. factored gives

C. factored gives

D. cannot be factored

4. Which of the following binomials is a factor of ?

A. C.

B. D.

5. Which of these is **prime** over the set of rational numbers?

A. C.

B. D.

6. What are the solutions of ?

A. C.

B. D.

7. Factor the polynomial

completely.

A.

B.

C.

D.

8. An equation and the first step in its solutions are shown below.

Step 1:

What value of *h* should be added to both sides to complete the square?

A. C.

B. D.

9. Find the roots of the equation .

A. C.

C. D.

10. What is the solution set of the equation ?

A. C.

B. D.

11. What is the standard form of the equation ?

A. C.

B. D.

12. What is the solution set of the equation ?

A. C.

B. D.

13. What is the solution set of

?

A. C.

B. D.

14. What is the solution set of the equation ?

A. C.

B. D. No real solutions

15. Find the roots of the equation:

A. C.

B. D.

16. What is the value of *c* that should be added to both sides of the following equation to complete the square?

A. C. 25

B. 100 D. 20

**Solving Quadratic Equations Test – Part 2**

**Answer each question on your answer sheet. SHOW YOUR WORK for partial credit!**

**Point values are listed after each question.**

1. What is the discriminant formula? (3 pts)

2. What is the quadratic formula? (4 pts)

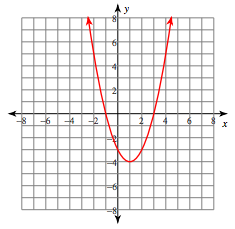
3. What is the solution set to the equation ? (5 pts)

4. What value of *c* should be added to both sides of the following equation to complete the square? (5 pts)

5. What is the solution set to the equation (6 pts)

6. What is the solution set to the equation ? (7 pts)

7. Look at the following graph:



a. How many roots does the quadratic function have? (2 pts)

b. What are the zeros? (4 pts)