**Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

**\_\_\_\_ 1.** Use the graph to write the solution of this quadratic inequality: 



|  |  |  |  |
| --- | --- | --- | --- |
| **A.** | , | **C.** | , |
| **B.** | , | **D.** | , |

**\_\_\_\_ 2.** Represent the solution of this quadratic inequality on a number line: 

|  |  |
| --- | --- |
| **A.** |  |
| **B.** |  |
| **C.** |  |
| **D.** |  |

**\_\_\_\_ 3.** Which coordinates are a solution of the inequality ?

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **A.** | (2, 8) | **B.** | (0, 1) | **C.** | (3, 7) | **D.** | (5, 8) |

**\_\_\_\_ 4.** A doctor books patients for either 15-min or 30-min appointments. She sees patients a maximum of 30 h each week. Write an inequality that represents the doctor’s weekly appointments. Let *x* represent the number of 15-min appointments and *y* represent the number of 30-min appointments*.*

|  |  |  |  |
| --- | --- | --- | --- |
| **A.** |  | **C.** |  |
| **B.** |  | **D.** |  |

**\_\_\_\_ 5.** Which ordered pair is a solution of the quadratic inequality ?

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **A.** | (3, 36) | **B.** | (1, 1) | **C.** | (–1, 2) | **D.** | (2, 19) |

**\_\_\_\_ 6.** Which graph represents the inequality *y*  ?

|  |  |  |  |
| --- | --- | --- | --- |
| **A.** |  | **C.** |  |
| **B.** |  | **D.** |  |

**\_\_\_\_ 7.** Solve this quadratic-quadratic system algebraically.





|  |  |  |  |
| --- | --- | --- | --- |
| **A.** | (2, 3) and (–2, 5) | **C.** | (2, 7) and (–2, 7) |
| **B.** | (–2, 3) and (2, 5) | **D.** | (3, 7) and (–3, –2) |

**\_\_\_\_ 8.** Solve this linear-quadratic system algebraically.





|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **A.** | (5, 2) | **B.** | (2, 5) | **C.** | (–2, 1) | **D.** | (2, 33) |

**Short Answer**

**1.** Solve this quadratic inequality: 

2**.** Graph the inequality: **

**Answer Section**

**1.** ANS: B

**2.** ANS: A

**3.** ANS: A

**4.** ANS: D

**5.** ANS: D

**6.** ANS: A

**7.** ANS: C

**8.** ANS: C

**SHORT ANSWER**

**1.** ANS:

The solution is: ,  **2.** ANS: 