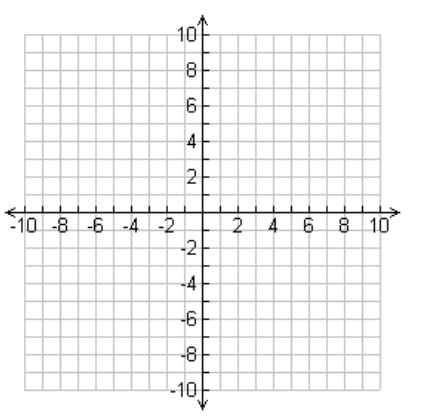
**Algebra II Core – First Semester Midterm Review 2016 Part 1**

**1. Solve the linear system:**

**2. Graph the linear system and estimate the solution:**

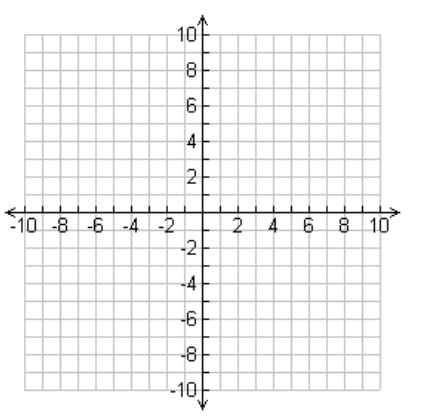
**3. In one day, a movie theater collected $4600 from 800 people. The price of admission is $7 for an adult and $5 for a child. How many adults and how many children were admitted to the movie theater that day?**

**4. Solve the system of equations:**

**5. Graph the system of linear inequalities:**

**6. Which ordered pair is a solution to the system in #7?**

**a) (-3,1) b) (1,1) c) (0,4) d) (-4,0)**

**7. Graph the function:**

**8. Write the equation in intercept form of a quadratic.**

**9. Solve**

**10. Solve**

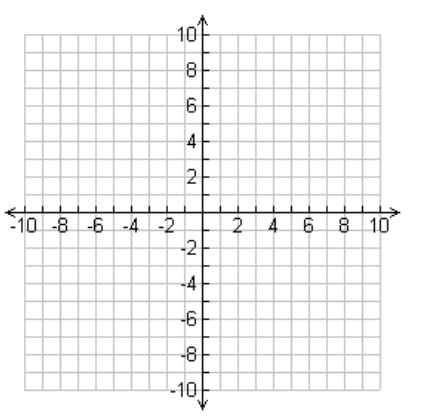
**11. Describe the end behavior for the graph: .**

**Algebra II Core – First Semester Midterm Review 2016 Part 2**

**12. Solve . 13. Solve .**

**14. Solve . 15. Solve .**

**16. Solve 17. Solve**

**18. Graph .**

**19. Find all of the zeros of the function .**

**20. Write a polynomial function that has zeros 4, -1, 2 and has a leading coefficient of 1.**

**A) in intercept form. B) in standard form.**

**21. Graph .**

**22. Identify all horizontal and vertical asymptotes of the graph of the function. Find the domain.**

**23. Add**

**24. Solve. Check for extraneous solutions.**

**25. In the quadratic formula , how does “a” affect the graph and how does “c” affect the graph?**

**27. The price per person of renting a cabin varies inversely with the number of people renting the cabin. It cost $40 per person if 8 people rent the cabin. How much will it cost per person if 12 people rent the cabin?**