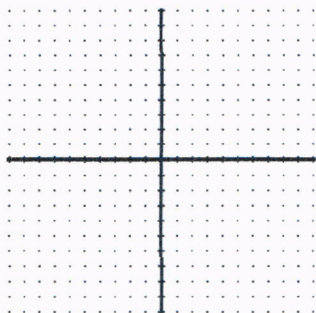
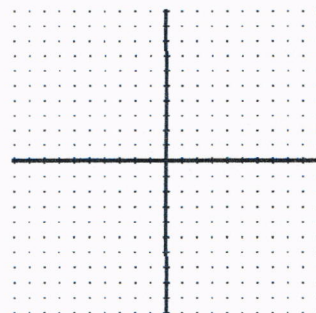


Part 1 Graph each of the following using a 5-point table:

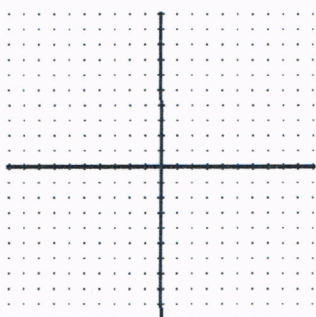
1. $y = x^2 - 2x - 3$



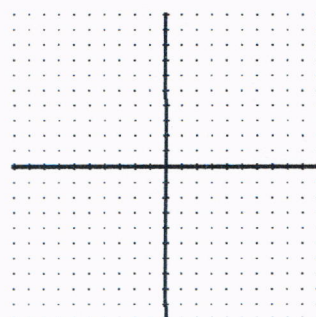
2. $y = x^2 + 4x - 12$



3. $y = 2x^2 - 2x - 12$



4. $y = 24x^2 - 14x - 3$



Part 2 Using your graph, go back and estimate what the solutions (zeros, x-intercepts, roots) are for #s 1-4:

5. Solutions to #1

6. Solutions to #2

7. Solutions to #3

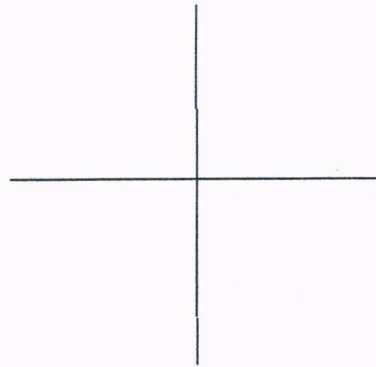
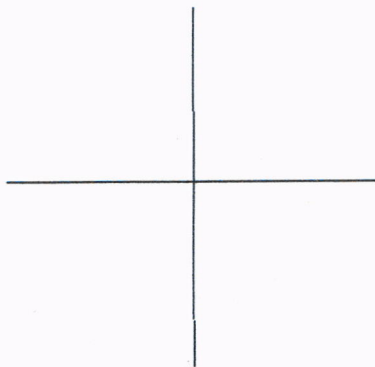
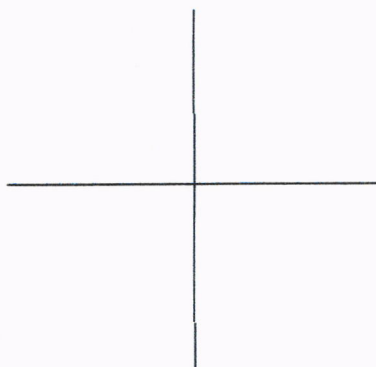
8. Solutions to #4

Part 3 Sketch a graph for each of the following. Label the vertex, axis of symmetry, and x-intercepts.

9. $y = x^2 - 4x - 21$

10. $y = (x - 5)(x + 1)$

11. $y = (x - 1)^2 - 9$



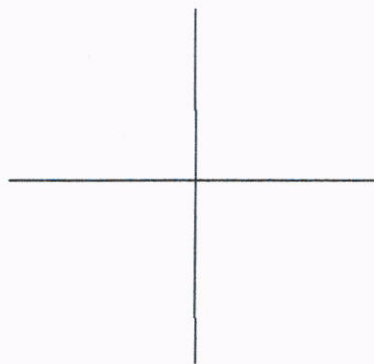
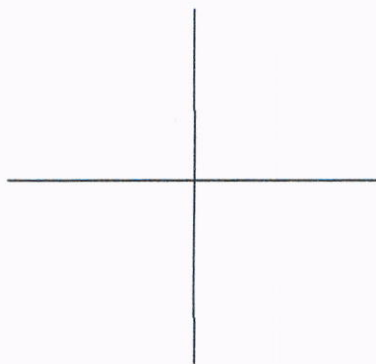
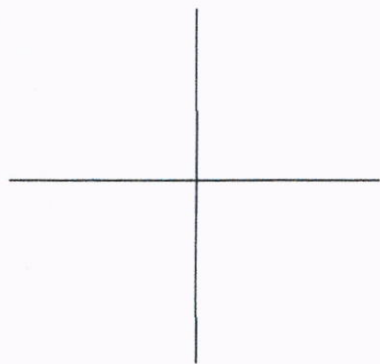
Part 4

Sketch a graph for each of the following. Label the vertex, axis of symmetry, and x-intercepts.

12. $y = -3(x + 8)(x + 2)$

13. $y = 2(x - 4)^2 - 2$

14. $y = -x^2 - 12x - 32$

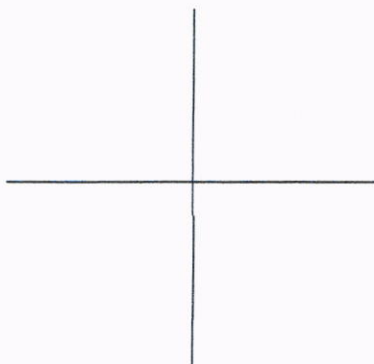
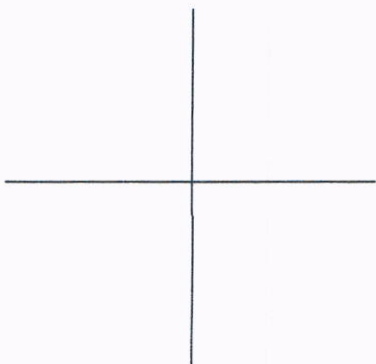
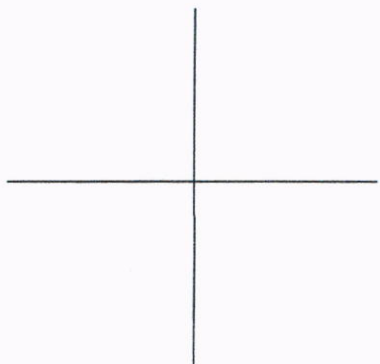


15. $y = -2(x + 8)^2 - 7$

*Estimate the intercepts

16. $y = x^2 - 8x - 9$

17. $y = -4(x + 5)(x - 7)$

**Part 5**

Use your calculator to sketch a graph of each of the following. **ESTIMATE** the vertex, axis of symmetry, and x-intercepts.

18. $y = 2.3x^2 - 5.1x - 12.7$

19. $y = .2x^2 - 22$