1- Answers:

- **a.** The x-intercepts are (4,0) and (2,0). The y-intercept is (0,8).
- **b.** The x-intercept are (1,0) and (-1,0). There is no y-intercept.
- c. The x-intercepts are (-2,0) and (2,0). The y-intercept are (0,-2) and (0,2).
- **2-** Answers:
- **a.** Symmetric with respect to the origin.
- **b.** Symmetric with respect to the *y*-axis.
- c. Symmetric with respect to the *y*-axis.
- **3-** Answers:
- **a.** Center is (1,1) and radius is $r = \sqrt{6}$.
- **b.** Center is $(\frac{1}{2}, 0)$ and radius is $r = \frac{1}{2}$.
- **c.** Center is (0, -1) and radius is r = 1.
- **4-** B = (-14, 55).
- **5-** Answers:
- **a.** No, because the length of PQ is $\sqrt{52}$ while the length of PR is $\sqrt{65}$.