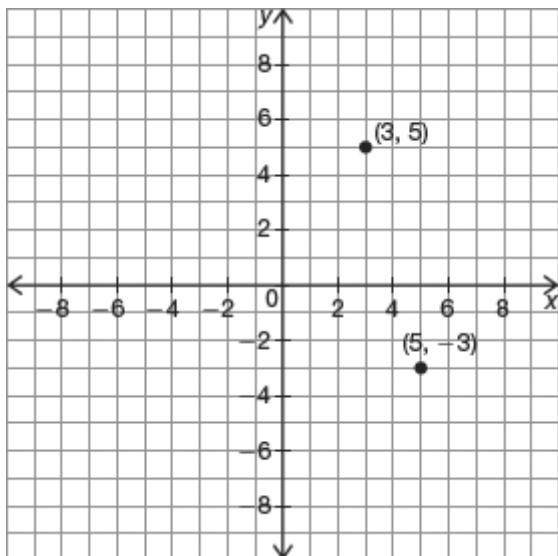
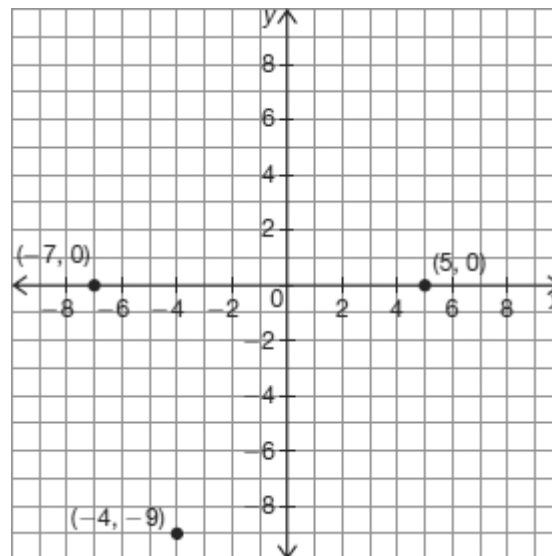


Use your knowledge of reference points to write an equation for the quadratic function that satisfies the given information. Use the graph to help solve each problem.

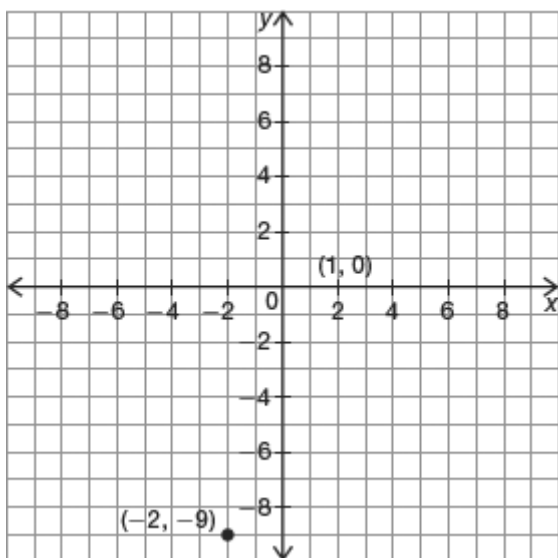
1. Given: vertex $(3, 5)$ and point $(5, -3)$



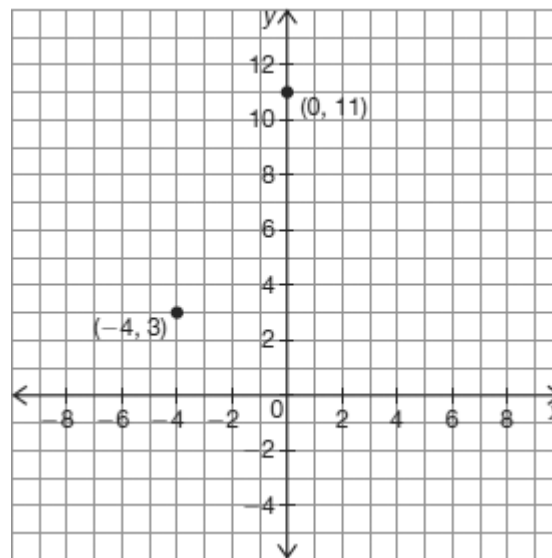
2. Given: two x -intercepts $(-7, 0)$ and $(5, 0)$ and one point $(-4, -9)$



3. Given: vertex $(-2, -9)$ and one of two x -intercepts $(1, 0)$



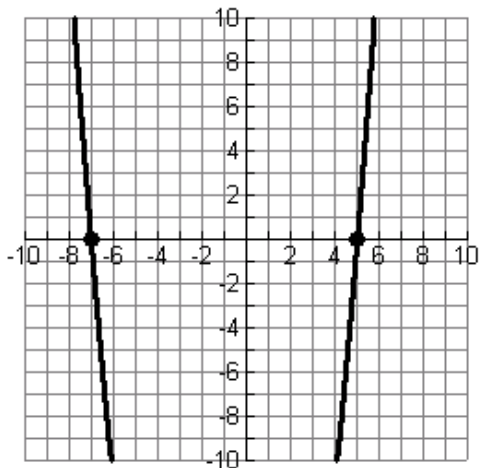
4. Given: vertex $(-4, 3)$ and y -intercept $(0, 11)$



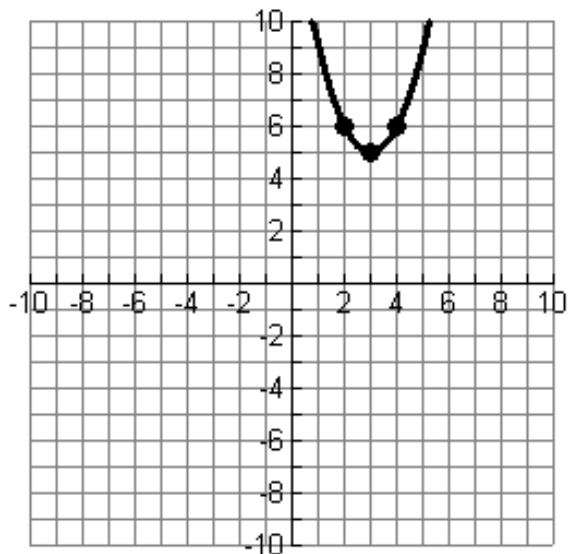
5. Create a system of equations and use algebra to create a quadratic equation with points $(-2, 3)$, $(2, -9)$, and $(0, 5)$.

6. Write the equation of a quadratic, in both factored and standard form, with solutions at -3 and $\frac{4}{3}$.

7. Write the equation of a quadratic, in factored form, given the following graph,



8. Write the equation of the quadratic in the graph shown below.



A. Standard form:

B. Vertex form:

C. Why can't you write factored form using real numbers?