

Answer the following questions in complete sentences.

1. How do we find the x-intercepts of a function?

2. How do we find the y-intercept of a function?

3. How do we find the axis of symmetry of a function?

4. How do we find the vertex of a function?

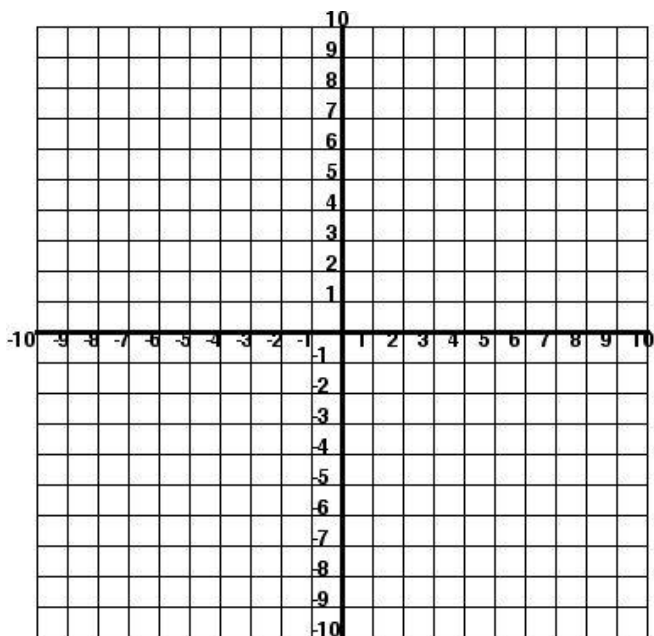
For #1 – 7 find the following and label it on the graph of each function:

- x-intercepts
- y-intercept
- axis of symmetry
- vertex

Show work on a separate paper.
Staple and turn in with worksheet.

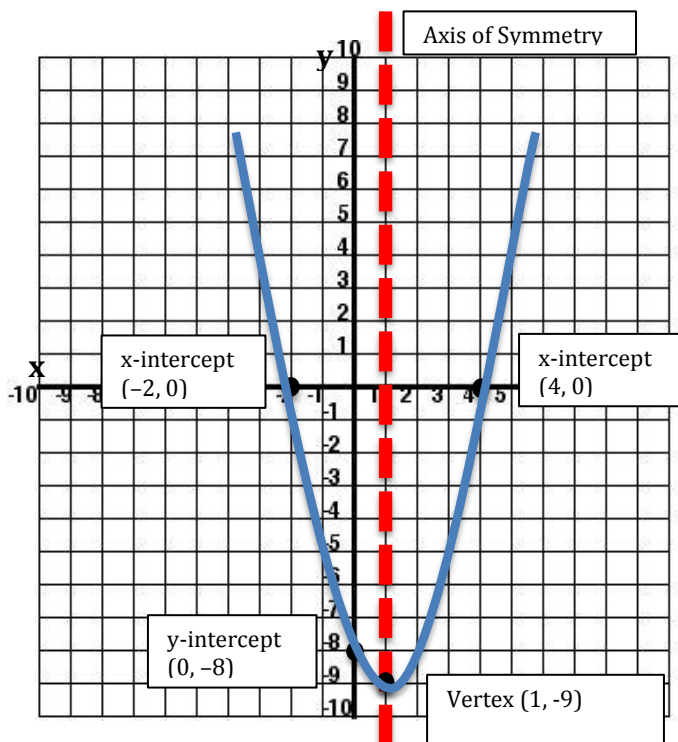
Graph the following functions.

1. $f(x) = x^2 + 2x - 3$

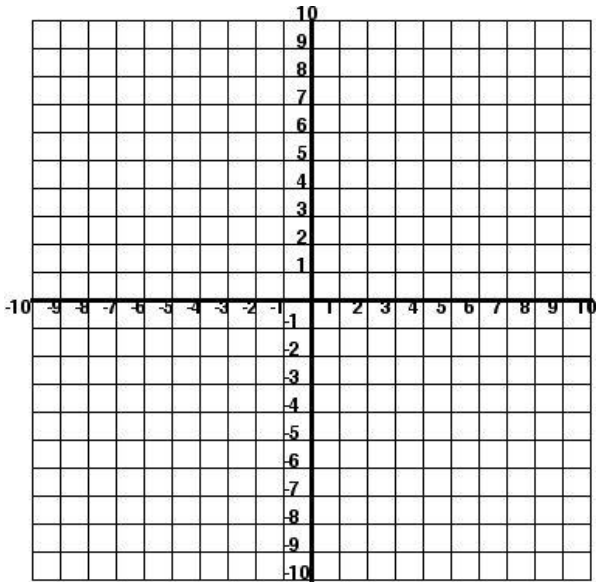


Here is an Example Graph

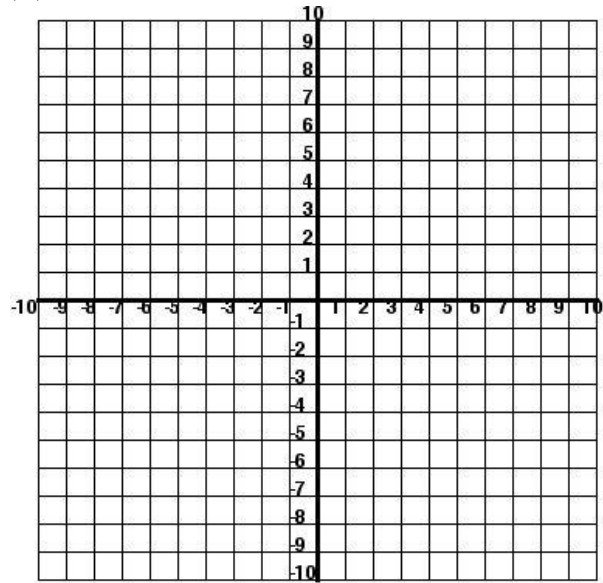
$$f(x) = x^2 - 2x - 8$$



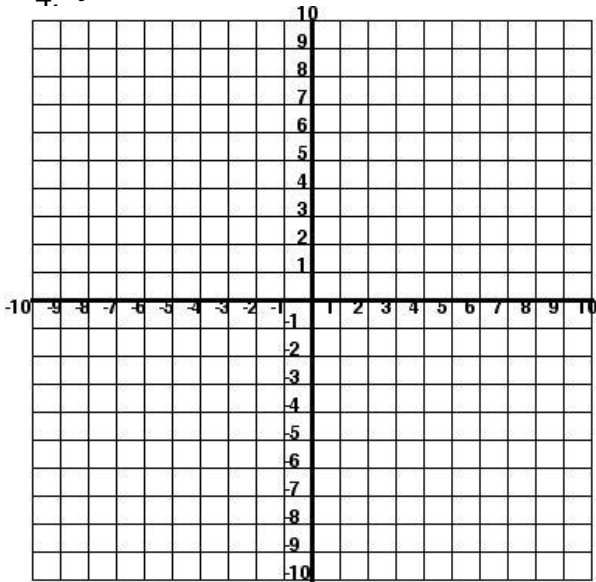
2. $f(x) = x^2 - 6x + 8$



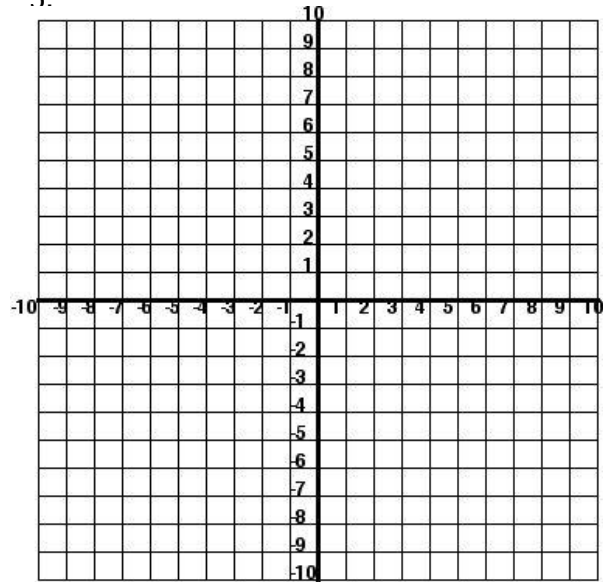
3. $f(x) = x^2 - 4$



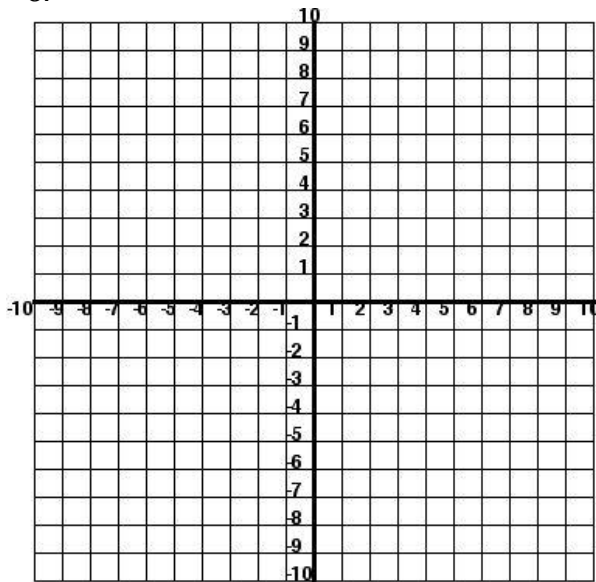
4. $f(x) = x^2 + 4x$



5. $f(x) = 2x^2 - 8x + 6$



6. $f(x) = \frac{1}{2}x^2 + 4x + 6$



7. $f(x) = -\frac{1}{2}x^2 - \frac{3}{2}x$

