17 (a) The degree is 2 and leading coefficient is $-\frac{1}{2}$.

(b) Since the degree of f is even and the leading coefficient is negative, its graph will go down on both sides.

(c) The graph of $f(x) = -\frac{1}{2}x^2 + 2x + 4$ is shown in *Figure 17*.

[−10, 10, 1] by [−10, 10, 1]

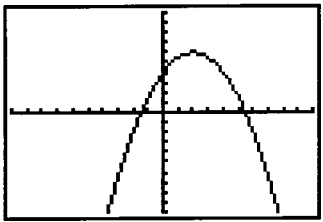

Figure 17