Calculus, Metric Version (9th Edition) by James Stewart, Daniel Clegg, and Saleem Watson

- **1.** Let f be the function whose graph is given
 - (a) Estimate the value of f(2).
 - **(b)** Estimate the values of x such that f(x) = 3.
 - (c) State the domain of f.
 - (d) State the range of f.
 - **(e)** On what interval is *f* increasing?
 - (f) Is f even, odd, or neither even nor odd? Explain

2. Determine whether each curve is the graph of a function of *x*. If it is, state the domain and range of the function.

3. If $f(x) = x^2 - 2x + 3$, evaluate the difference quotient

$$\frac{f(a+h)-f(a)}{h}.$$

4. Sketch a rough graph of the yield of a crop as a function of the amount of fertilizer used.

Exercise No. 5–8