Section 2.4 - Exercises

#17

- a) Find the domain and range of the function.
- b) Identify the intercepts on the graph.
- c) Find f(-3), f(1) and f(4).





#71

For children between ages 6 and 10, height y (in inches) is frequently a linear function of age t (in years). The height of a certain child is 48 inches at age 6 and 50.5 inches at age 7.

- a) Express *y* in terms of *t*.
- b) Sketch the line in part (a), and interpret the slope.
- c) Predict the height of the child at age 10.

#72

It has been estimated that 1000 curies of a radioactive substance introduced at a point on the surface of the open sea would spread over an area of 40,000 square km in 40 days. Assuming that the area covered by the radioactive substance is a linear function of time t and is always circular in shape, express the radius r of the contamination as a function of t.