Suppose 
$$f(x) = \sqrt{x^2 - 5x - 6}$$
.

- a) Find f(7)
- b) Find f(2x+1)
- c) Determine the domain of f?

$$f(7) = \sqrt{49 - 35 - 6} = \sqrt{8} = 2\sqrt{2} = 2.83$$

• 
$$f(2x+1) = \sqrt{(2x+1)^2 - 5(2x+1) - 6} = \sqrt{4x^2 - 6x - 10}$$

• The domain of f consists of those points for which  $x^2-5x-6 \ge 0$ .

$$x^2 - 5x - 6 \ge 0$$

$$(x-6)(x+1) \ge 0$$

+ - + - 6

Domain:  $x \le -1$  or  $x \ge 6$