

31 Express formally

(a) the absolute value of a real number x .

(b) the sign of a real number x , which is -1 , 0 , or $+1$ depending on whether x is negative, zero, or positive.

After trying the question, scroll down to the solution.

Solutions

(a) the absolute value of a real number x .

§ **if $x \geq 0$ then x else $-x$ fi**

(b) the sign of a real number x , which is -1 , 0 , or $+1$ depending on whether x is negative, zero, or positive.

§ **if $x < 0$ then -1 else if $x = 0$ then 0 else 1 fi fi**