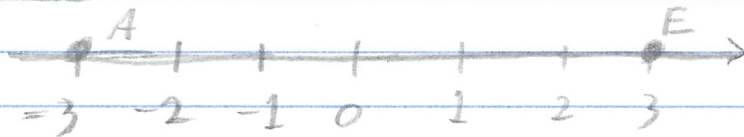


Exercise A.1.49 Use the number line



to find  $d(A, E)$ .

Solution

The coordinate of point A is  $x_A = -3$  and the coordinate of point E is  $x_E = 3$ . On the real line, the distance between two points is the absolute value of the difference of the coordinates,

Therefore

$$d(A, E) = |x_A - x_E| = |(-3) - (3)|$$

$$= |-6| = 6,$$

or  $\boxed{d(A, E) = 6.}$   $\square$