

$$A(x) = 10 \left( \sum_{k=1}^{\left\lfloor \frac{x-a}{\Delta x} \right\rfloor} r(a + (k-1)\Delta x) \Delta x + r(x)(x - \text{left}(x)) \right) \text{ if } x \geq a$$

The diagram illustrates the components of the area function  $A(x)$  for  $x \geq a$ . The function is defined as:
 
$$A(x) = 10 \left( \sum_{k=1}^{\left\lfloor \frac{x-a}{\Delta x} \right\rfloor} r(a + (k-1)\Delta x) \Delta x + r(x)(x - \text{left}(x)) \right) \text{ if } x \geq a$$
 Annotations in the diagram include:
 

- An arrow pointing to the floor function  $\left\lfloor \frac{x-a}{\Delta x} \right\rfloor$ .
- An arrow pointing to the summand  $r(a + (k-1)\Delta x) \Delta x$ .
- An arrow pointing to the function  $r$ .
- An arrow pointing to the variable  $x$ .
- An arrow pointing to the function  $\text{left}(x)$ .