

We have  $z = 1.23$ .

Here is the picture of the area we want.

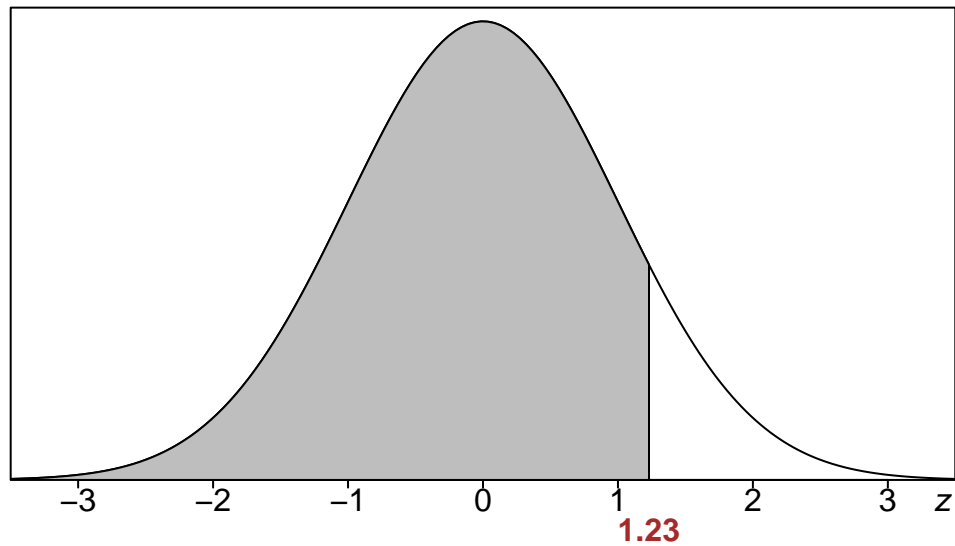


Figure 1: This is the left tail area we want.

We want the shaded region to the left of  $z = 1.23$ . We will calculate this area using a spreadsheet and the **NORMSDIST** function which gives left tail areas for  $z$ -values.

- Type **z** in cell **B2**
- Then type 1.23 into **C2**

Table 1: Enter the  $z$ -value

	A	B	C	D
1				
2		$z$	1.23	
3				
4				

- Then type in **left tail area** in **B3**,
- In cell **C3** type **=NORMSDIST(** then click on **C2** then type **)** then hit enter

Table 2: Enter the NORMSDIST formula

	A	B	C	D
1				
2		z	1.23	
3		left tail area	=NORMSDIST(C2)	
4				

Table 3: After entering you should see the result

	A	B	C	D
1				
2		z	1.23	
3		left tail area	0.8907	
4				

Rounded to the nearest percent this is **89%**.

This means that the left tail area for  $z = 1.23$  is **89%**.