Step 1 of 1

Given that,

margin of error, E=7

population standard deviation, σ=13

significance level,α=0.10 i.e. (10%)

here we need to find the required sample size ,n

We have,

formula for Margin of error, E=Zα2\*σn

⇒n=(Zα2\*σ)/E

⇒n=(Zα2\*σ)/E)^2

**Final Answer**

For,

α=0.10

The critical value ,Zα2=Z0.05 =1,6445

Margin of error, E=Zα2\*σn

⇒n=(Zα2\*σ)/E

⇒n=(Zα2\*σ)/E)^2

E=7 & σ=13

n=((1,6445\*13)/7)^2

=(3.540714)62

=9.3274

Therefore, n≈9

**Ans: Thde required sample size n is 9**