This is a *sample means question*, so I will use SE instead of SD.

$Z= \frac{\overbar{x}-μ}{σ/\sqrt{n}}= \frac{200-191}{22.4/\sqrt{20}} \frac{9}{5.008}=$ 1.8

In R: pnorm(1.8)

[1] 0.9640697

P(Z<1.8) = 0.964

P(Z>1.8) = 1-0.964 = 0.036 =3.6%