

80. Solution: C

By the central limit theorem, the total contributions are approximately normally distributed with mean $n\mu = (2025)(3125) = 6,328,125$ and standard deviation

$\sigma\sqrt{n} = 250\sqrt{2025} = 11,250$. From the tables, the 90th percentile for a standard normal random variable is 1.282. Letting p be the 90th percentile for total contributions,

$$\frac{p - n\mu}{\sigma\sqrt{n}} = 1.282, \text{ and so } p = n\mu + 1.282\sigma\sqrt{n} = 6,328,125 + (1.282)(11,250) = 6,342,548.$$