Question #195
Key: B

$$F_{100}(1,000) = 0.16,\ F_{100}(3,000) = 0.38,\ F_{100}(5,000) = 0.63,\ F_{100}(10,000) = 0.81,$$

$$F_{100}(2,000) = 0.5(0.16) + 0.5(0.38) = 0.27,$$

$$F_{100}(6,000) = 0.8(0.63) + 0.2(0.81) = 0.666.$$

$$\Pr(2,000 < X < 6,000) = 0.666 - 0.27 = 0.396.$$