34) Let X be the random gain from operations of a company. You are given:

(i) X is normally distributed with mean 42 and variance 6400.

(ii) p is the probability that X is negative.

(iii) K is the amount of capital such that the Value-at-Risk (VaR) at the 5^{th} percentile for $X + K$ is zero.

Calculate p and K.

(A) $p = 0.7$; $K = 157$

(B) $p = 0.7$; $K = 131$

(C) $p = 0.5$; $K = 115$

(D) $p = 0.3$; $K = 115$

(E) $p = 0.3$; $K = 90$