

Introduction to Derivatives and Financial Markets
Assignment – 1

1. C
2. C
3. D
4. C
5. C
6. A
7. B
8. B
9. A
10. D
11. A
12. D
13. A
14. D

15.

a. $h^* = \rho * \frac{\sigma_A}{\sigma_F} = 0.95 * \frac{0.43}{0.40} = 1.02125$

b. The hedger should take a short position.

c. $N^* = h^* * \frac{Q_A}{Q_F} = 1.02125 * \frac{55,000}{5,000} = 11.23375 = 11 \text{ contracts}$

d. To account for the daily settlement, one can tail the hedge by considering the values of the underlying asset and futures.

Tailing the hedge, we have:

$$N^* = h^* * \frac{V_A}{V_F} = 1.02125 * \frac{55,000 * 28}{5,000 * 27} = 11.6498 = 12 \text{ contracts}$$