

**Given:**

Number of call options = 50

Theta ( $\Theta$ ) = -0.05 per option

Time period = 10 days

Contract size = 100 shares per option (assuming standard contract size)

**Calculate daily time decay loss per option:**

Daily time decay loss per option =  $\Theta \times \text{contract size}$

Daily time decay loss per option =  $-0.05 \times 100 = -5$

**Calculate daily time decay loss for the entire position:**

Daily time decay loss for the entire position = Daily time decay loss per option  $\times$  number of options

Daily time decay loss for the entire position =  $-5 \times 50 = -250$

**Calculate the total time decay loss over 10 days:**

Total time decay loss over 10 days = Daily time decay loss for the entire position  $\times$  time period

Total time decay loss over 10 days =  $-250 \times 10 = -2500$