

## Module 1

### Problem 1.10

An investor writes a December put option with a strike price of \$30. The price of the option is \$4. Under what circumstances does the investor make a gain?

**Answer:**

PUT / CALL:

$K/X =$

Premium =

$S =$

LONG position	$S < 30$	$S > 30$	$S = 26$
Exercise	Yes / No	Yes / No	Yes
Profit	$30 - S$	0	0
Total profit	$30 - S - 4$	-4	0

### Problem 1.16

Suppose that a March call option on a stock with a strike price of \$50 costs \$2.50 and is held until March. Under what circumstances will the holder of the option make a gain? Under what circumstances will the option be exercised?

**Answer:**

**Problem 1.14**

*Suppose you own 5,000 shares that are worth \$25 each. How can put options be used to provide you with insurance against a decline in the value of your holding over the next four months? (Suppose each option contract covers 100 shares)*

**Answer:**

A decline in value: PUT / CALL ?	Position: LONG / SHORT ?
K/X = ?	Number of contracts: ?
Exercise when:?	

**Problem 1.15**

*A wheat farmer expects to have 100 metric tonnes of Western Australian wheat to sell in three months. The Western Australian wheat futures contract on the Australian Securities Exchange is for the delivery of 20 metric tonnes of wheat. How can the farmer use the contract for hedging? From the farmer's viewpoint, what are the pros and cons of hedging?*

**Answer:**

Advantage/Pros	Disadvantage/Cons