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# **Option Selling Strategies**

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# Option Selling Strategies

## Outline

- **Time Decay**
- **Covered Call**
- **Cash Secured Put**
- **Summary / Q&A**

# Time Decay

## Intrinsic Value and Time Value

### Intrinsic Value

The amount that an option is in the money

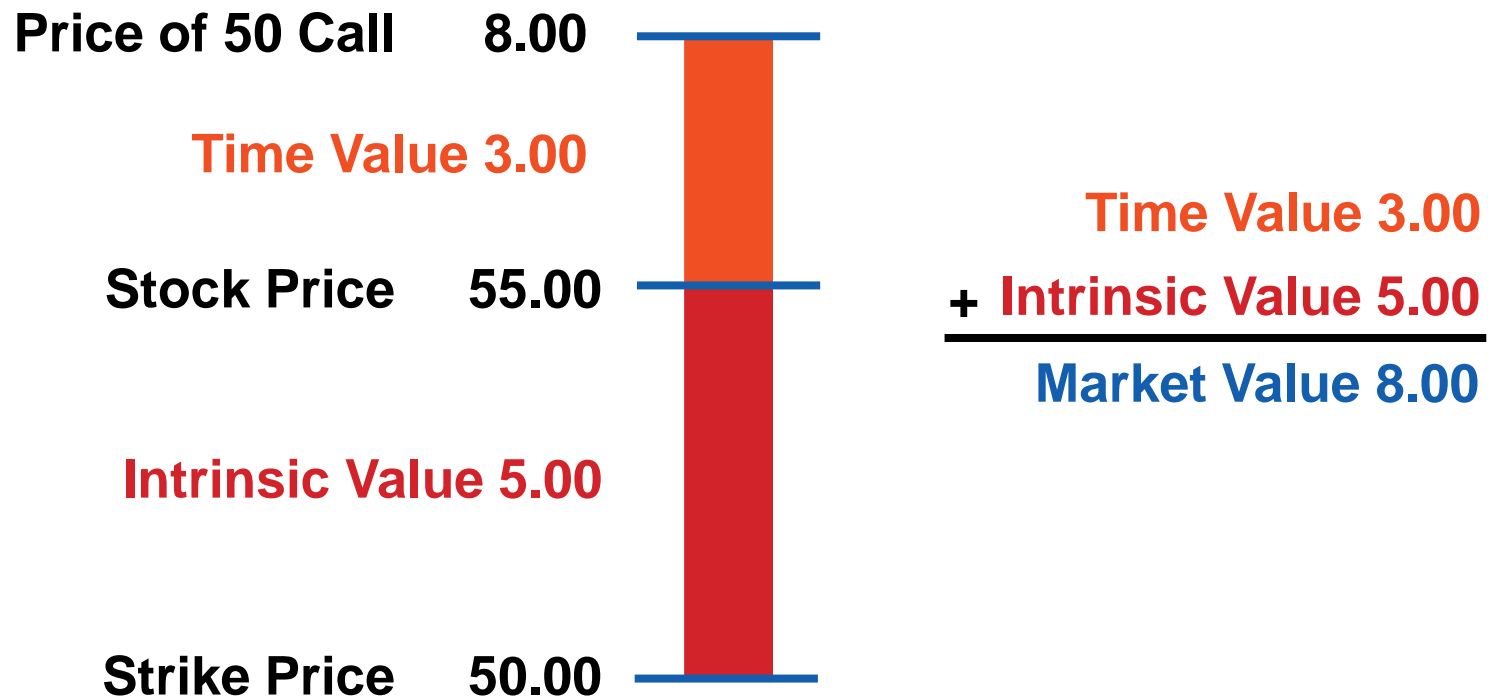
### Time Value

The portion of an option price that is above  
the intrinsic value

# Time Decay

## Intrinsic Value and Time Value

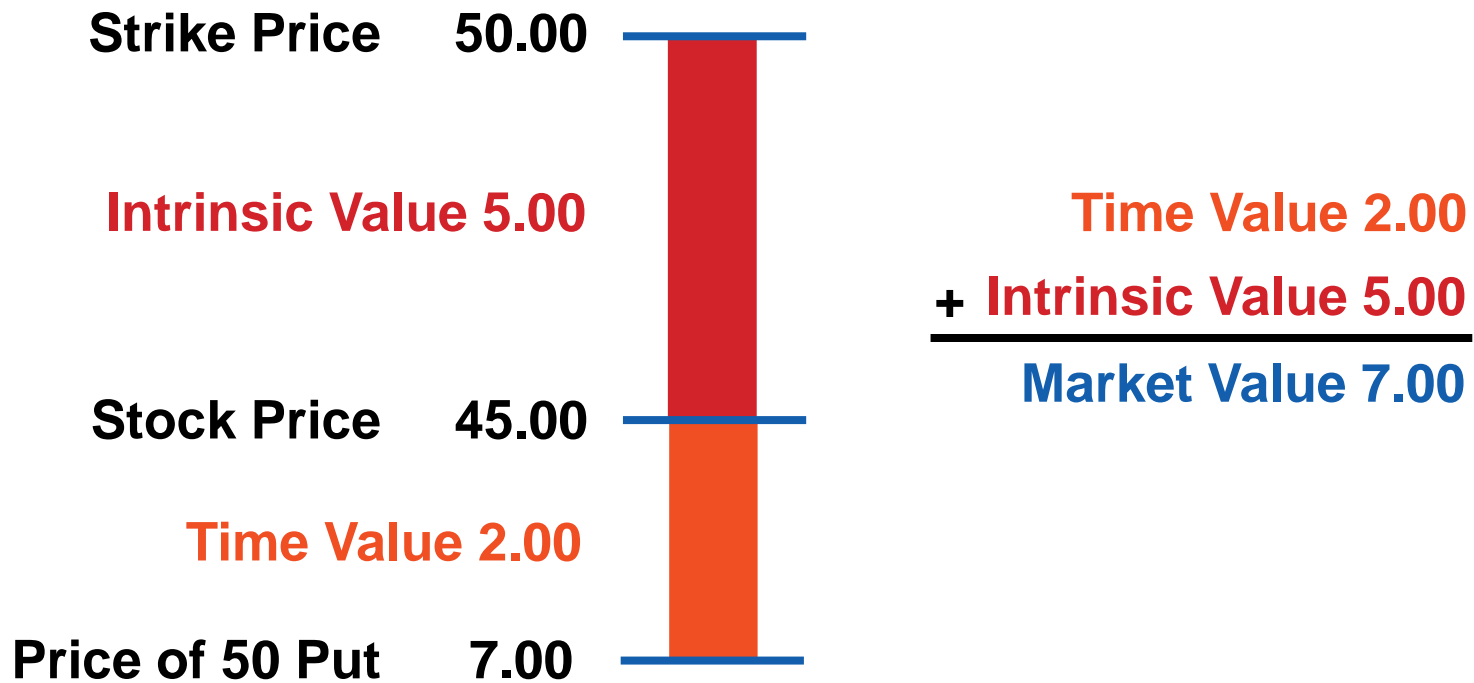
**XYZ at 55.00 – XYZ 50 Call at 8.00**



# Time Decay

## Intrinsic Value and Time Value

XYZ at 45.00 – XYZ 50 Put at 7.00



# Time Decay

## Time Value

**As expiration approaches the time value of an option decays.**

**A long option position has time working against it.**

**A short option position has time working for it.**

# Time Decay

## Time Value

### XYZ at 60.00

	30 Days	25 Days	20 Days	15 Days	10 Days	5 Days	Expiration
55 Call	5.45	5.35	5.25	5.15	5.05	5.01	5.00
60 Call	2.05	1.90	1.70	1.45	1.20	0.85	0.00
65 Call	0.50	0.40	0.30	0.15	0.05	0.01	0.00

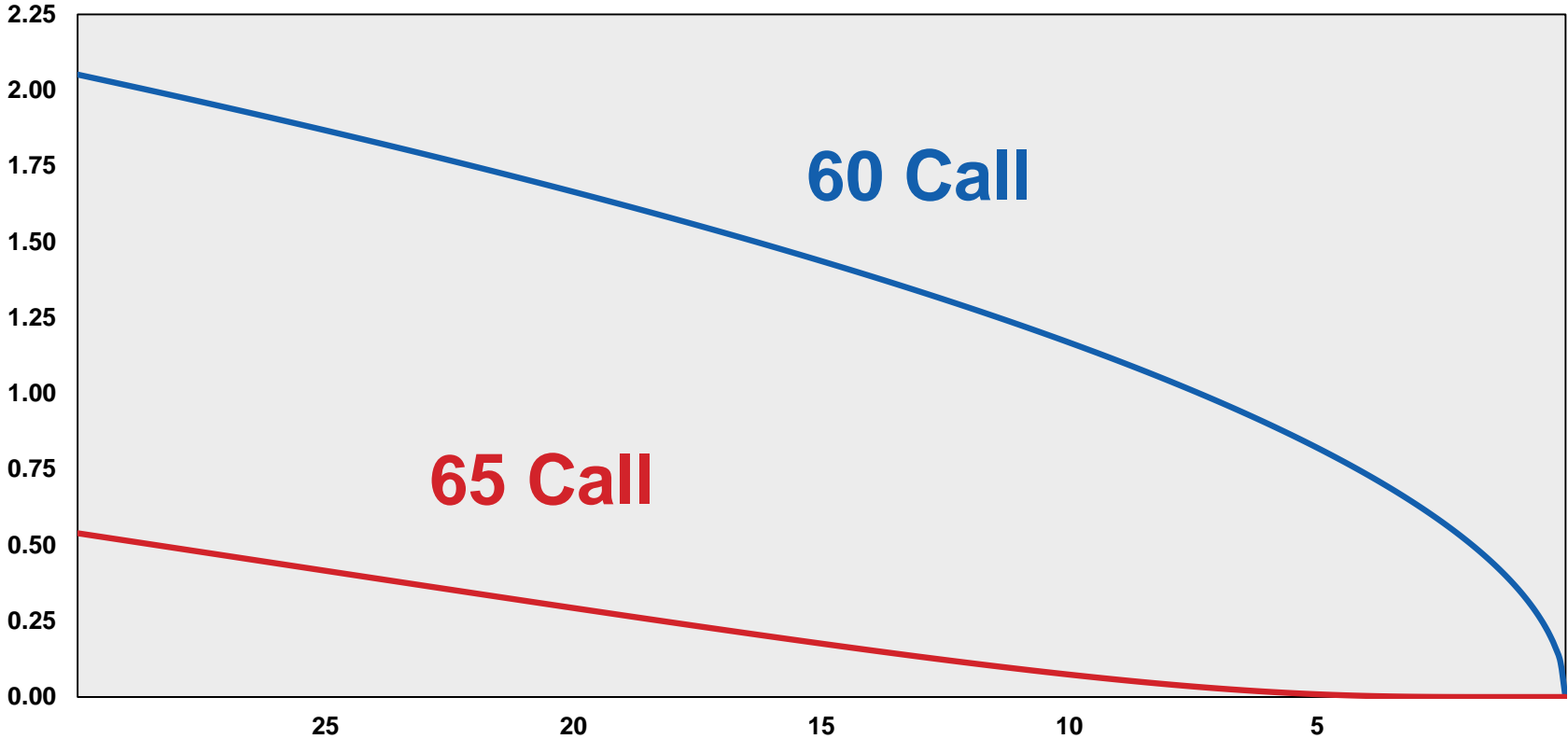
	30 Days	25 Days	20 Days	15 Days	10 Days	5 Days	Expiration
55 Put	0.50	0.40	0.30	0.15	0.05	0.01	0.00
60 Put	2.05	1.90	1.70	1.45	1.20	0.85	0.00
65 Put	5.45	5.35	5.25	5.15	5.05	5.01	5.00



# Time Decay

## Time Value

XYZ at 60.00



# Covered Call

## Overview

- **A covered call is the combination of long stock and short a call option**
- **The short call option results in an obligation to sell a stock**
- **This obligation is ‘covered’ by a long position in the underlying stock**
- **There are two motivations when implementing a covered call – exiting the stock and/or generating income**

# Covered Call

## Considerations

- **Any option selling strategy is implemented in order to take advantage of time decay**
- **Time decay is not consistent over all time periods or option strike prices**

# Covered Call

## Example

- On March 18<sup>th</sup> IBM is trading at 132.50
- A holder of 100 shares of IBM decides they would be a willing seller of shares over 135.00 in four weeks
- Standard April options expire on April 15<sup>th</sup>

### Trade

**Sell 1 IBM Apr 135 Call at 3.00**

### Covered Call Position

**Long 100 IBM at 132.50**

**Short 1 IBM Apr 135 Call at 3.00**

# Covered Call

## Covered Call – Payoff at Expiration

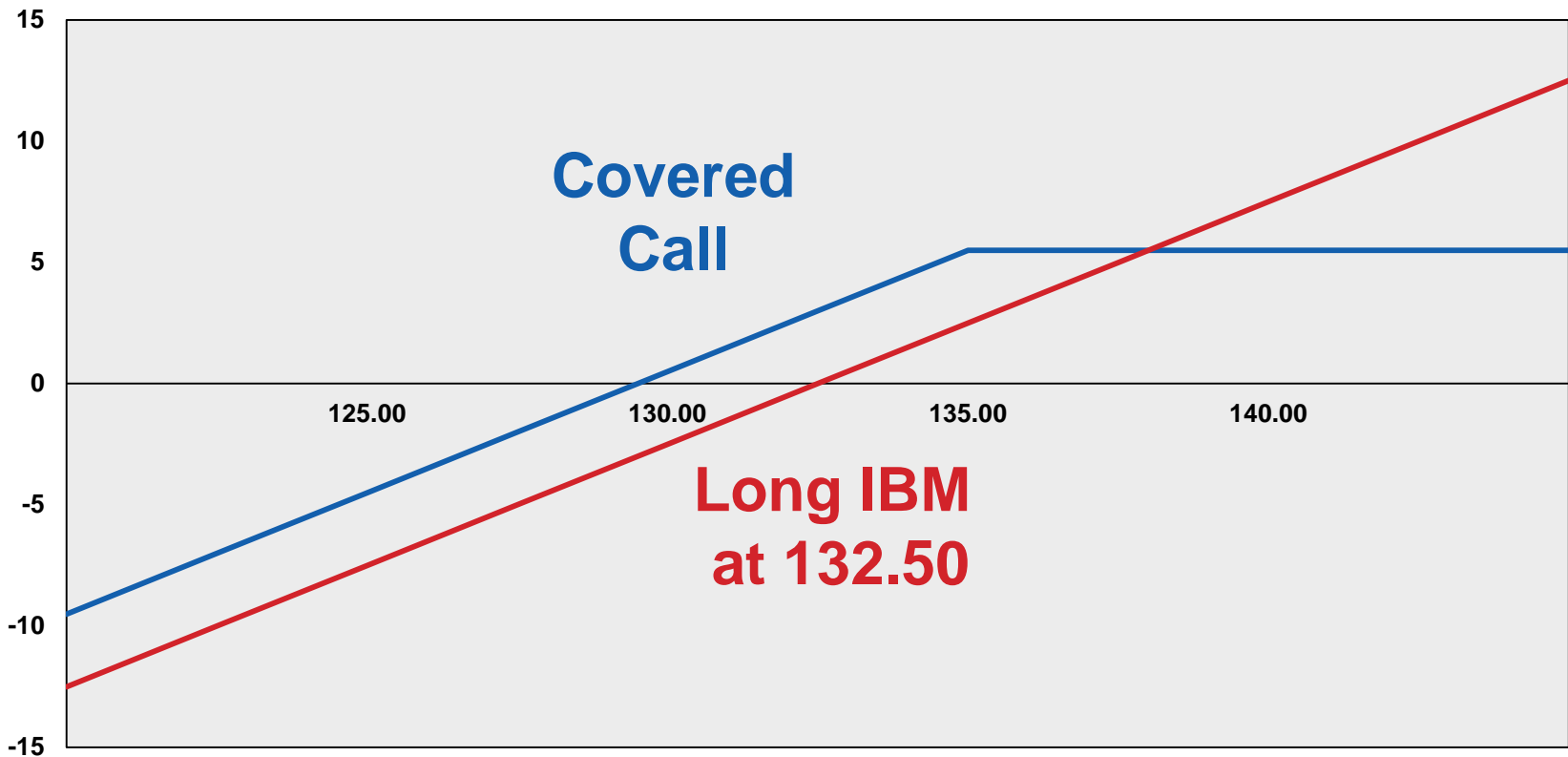
**Long 100 IBM at 132.50 + Short 1 IBM Apr 135 Call at 3.00**

Stock Price	Stock Profit / Loss	Call Value at Expiration	Option Income	Profit / Loss
125.00	(7.50)	0.00	3.00	(4.50)
127.50	(5.00)	0.00	3.00	(2.00)
130.00	(2.50)	0.00	3.00	0.50
132.50	0.00	0.00	3.00	3.00
135.00	2.50	0.00	3.00	5.50
137.50	5.00	(2.50)	3.00	5.50
140.00	7.50	(5.00)	3.00	5.50
142.50	10.00	(7.50)	3.00	5.50

# Covered Call

## Covered Call – Payoff at Expiration

**Long 100 IBM at 132.50 + Short 1 IBM Apr 135 Call at 3.00**



# Cash Secured Put

## Purchasing Stock

- **A seller of a put option takes on the obligation to buy shares of the underlying stock**
- **Berkshire Hathaway has used this method in the past to acquire shares of companies they find attractive**

# Cash Secured Put

## Trading Example

- IBM is trading at \$174.00 a share
- January expiration is in 40 days
- Berkshire Hathaway's average cost in 2010 was just under \$170.00
- A 170 strike put option may be sold and the result is the obligation to purchase shares

**Sell 1 IBM Jan 170 Put @ 2.25**



# Cash Secured Put

## Trading Example

### Short 1 IBM Jan 170 Put at 2.25 – Payoff Table

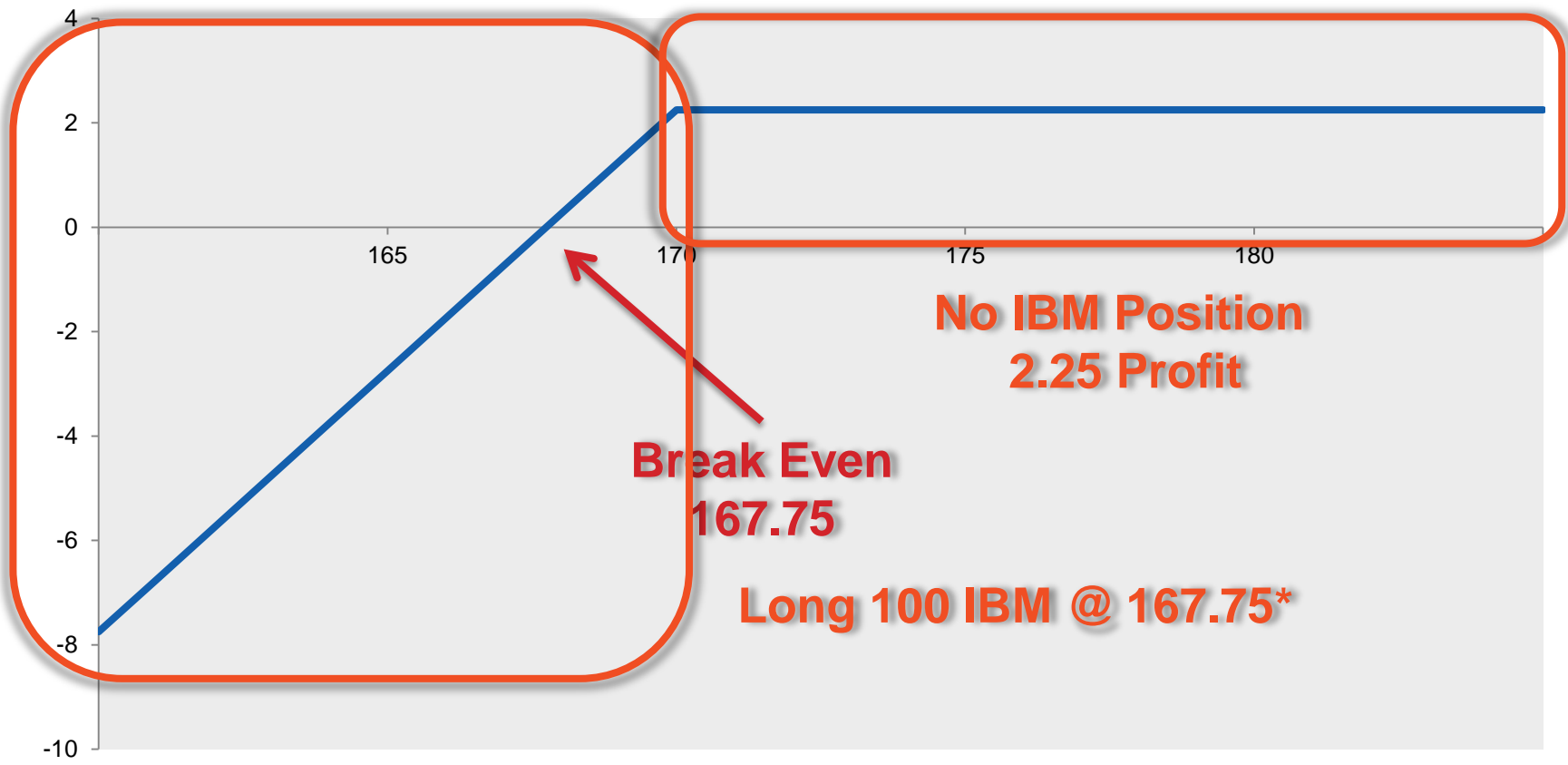
IBM	Short 1 Jan 170 Put	Premium Received	Profit / Loss	IBM Position
160	-10.00	2.25	-7.75	Long 100
165	-5.00	2.25	-2.75	Long 100
170	0.00	2.25	2.25	Long 100*
175	0.00	2.25	2.25	No Position
180	0.00	2.25	2.25	No Position
185	0.00	2.25	2.25	No Position

*\*Assigned or Purchase Upon Expiration*

# Cash Secured Put

## Trading Example

### Short 1 Jan IBM 170 Put at 2.25 – Payoff Diagram



# Option Selling Strategies

## Questions / Links / Contact

**Questions?**

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