

ACCOUNTANCY 422
SOLUTION TO SUPPLEMENTAL PROBLEM
PUTS & CALLS

1. a.

Option expires worthless. Loss is premium ($\$8 * 100 * 10$) = \$8,000.

1. b.

Exercise option to purchase stock ($\$90 * 100 * 10$)	\$90,000
Sell stock on the open market ($\$95 * 100 * 10$)	<u>95,000</u>
Gain on exchange	5,000
Premium (see above)	<u>8,000</u>
Net loss	<u>\$3,000</u>

1. c.

Exercise option to purchase stock ($\$90 * 100 * 10$)	\$ 90,000
Sell stock on the open market ($\$110 * 100 * 10$)	<u>110,000</u>
Gain on exchange	20,000
Premium (see above)	<u>8,000</u>
Net gain	<u>\$ 12,000</u>

2. a.

Buy stock on the open market ($\$30 * 100 * 20$)	\$60,000
Exercise option to sell stock ($\$35 * 100 * 20$)	<u>70,000</u>
Gain on exchange	10,000
Premium ($\$4 * 100 * 20$)	<u>8,000</u>
Net gain	<u>\$ 2,000</u>

2. b.

Option expires worthless. Loss is premium, \$8,000 (see above).

2. c.

Buy stock on the open market ($\$33 * 100 * 20$)	\$66,000
Exercise option to sell stock ($\$35 * 100 * 20$)	<u>70,000</u>
Gain on exchange	4,000
Premium ($\$4 * 100 * 20$)	<u>8,000</u>
Net loss	<u>\$ 4,000</u>

3. a.

The option expires worthless. The gain is the premium ($\$7 * 100 * 5$) = \$3,500

3. b.

Buy stock on the open market ($\$75 * 100 * 5$)	\$37,500
Option is exercised, sell to buyer ($\$70 * 100 * 5$)	<u>35,000</u>
Loss on exchange	2,500
Premium (see above)	<u>3,500</u>
Net Gain	<u>\$ 1,000</u>

3. c.

Buy stock on the open market ($\$78 * 100 * 5$)	\$39,000
Option is exercised, sell to buyer ($\$70 * 100 * 5$)	<u>35,000</u>
Loss on exchange	4,000
Premium (see above)	<u>3,500</u>
Net Loss	<u>\$ 500</u>

4. a.

Must buy from the put holder ($\$55 * 100 * 15$)	\$82,500
Sell on open market ($\$50,000 * 100 * 15$)	<u>75,000</u>
Loss on exchange	7,500
Premium ($\$5 * 100 * 15$)	<u>7,500</u>
No net gain or loss	<u><u>-0-</u></u>

4. b.

Option expires worthless. Gain is premium (\$7,500),

4. c.

Must buy from the put holder ($\$55 * 100 * 15$)	\$82,500
Sell on open market ($\$40 * 100 * 15$)	<u>60,000</u>
Loss on exchange	22,500
Premium ($\$5 * 100 * 15$)	<u>7,500</u>
Net loss	<u>\$15,000</u>