Sample Pricing Problems

1. You are a lessor and you have closed and funded a lease for 48 months with payments of $1,344.24 and a $1.00 residual. The lease has first and last payments in advance which you are going to retain and you want to discount the stream of remaining payments to a funding source. The funding source will receive its first payment 30 days following the closing of this discounted transaction. Your funders required yield is 13.5%.

   - How much will you receive from your funder?

   - The vendor payment was for $45,000. What is your total profit on this lease?

2. Determine the monthly payment of the following transaction:

   Lease Amount: $34,000
   Term: 60 Months
   Advance Pmts: 3
   Broker Fee: 8%
   Security Deposit: 10%
   Residual: 5%
   Yield: 11.75%

   - What is the monthly payment?

   - What is the yield if you take away the security deposit?

3. You are a funding source reviewing the following lease proposal:

   Lease Amount: $15,000
   Term: 36 Months
   Broker Fee: 6%
   Residual: 10%
   Monthly Payment: $485

   - You can choose to have either two advance payments or a 10% security deposit in place of the advance payments. Which structure will you choose to maximize your yield?

4. You are a Funding Source with a minimum yield requirement of 14.25%. You are asked to fund a 60-month lease with an equipment cost of $95,000. The lease payments are $2,150.00. The lease will have two advance payments and a 10% guaranteed residual to you. As part of the transaction you will need to pay a 5% brokerage fee. Are you able to meet your yield requirements and fund this lease?

   a. Yes
   b. No
   c. Not enough information is provided to make the decision

5. The minimum number of variables that must be available to solve a present value problem for a desired unknown on a lease transaction without a residual is?

   a. 2
   b. 3
   c. 4
   d. 5

6. Calculate the following items that are missing:

Lease Amount	Rate Factor	Lease Payment
$25,595	.02234	_____
$16,344	_____	$466.78
_____	.03789	$2,625.89

7. You have a 48-month lease with payments of 1,340.00 and you have collected two advance payments. You are planning on keeping the residual yourself but selling to a Funding Source the stream of remaining payments. You have two Funding Sources that will buy the stream of payments from you. Bank A has a yield of 13.5% and bank B has a yield of 12.75%. Which Bank will give you the best return?

   a. Bank A
   b. Bank B

   • What is the dollar difference between the two banks?

8. A Lessor has quoted a 60-month lease with first payment and a 15% security deposit in advance. The lease has a guaranteed 10% residual. As a part of this transaction the Lessor will pay a broker a 7% commission. The rate factor quoted was .023159. The lessee has countered the proposal with first and last payments in advance without the security deposit. The Lessor has decided to accept the Lessee's proposal and will keep the yield the same and the broker fee will remain at 7%. What rate factor does the Lessor quote to the broker that will include the broker fee and insure the Lessor maintains its yield requirements?

   a. .025324
   b. .024929
   c. .023327
   d. .024601

9. What is the rate factor for the following variables?

   Yield – 18%
   Advance Payments – 2
   Term – 36 months
   Rate Factor _____

10. You have a lease with four advance payments. Which scheduled payments do these advance payments account for?

   a. First four payments
   b. First two payments and last two payments
   c. First payment and last three payments
   d. Last four payments

11. Compute the monthly lease payment to achieve a yield of 18.5% given the following set of assumptions.

Equipment Cost:	$175,000
Broker Fee:	3.0%
Security Deposit:	$8,750
Residual	10%
Term	60 Months
Advance Payments	2
Monthly Payment	_____

12. What is the yield for the following lease terms?

Term:	60 Months
Advance Payments:	3
Equipment Cost:	74,160.54
Payment:	$1,666.40
Residual:	5%
Broker Fee:	6%

    Yield: _____

13. What is the monthly payment for the following lease terms?

Term:	36 Months
Advance Payments:	2
Equipment Cost:	$34,017.24
Yield	19.25%
Residual:	10%
Broker Fee:	$3,000
Security Deposit:	10%

    Monthly Payment: _____

14. With this same lease, what would the yield be if the lease was done without the security deposit?

Sample Pricing Answers

1. You are a lessor and you have closed and funded a lease for 48 months with payments of $1,344.24 and a $1.00 residual. The lease has first and last in advance which you are going to retain and you want to discount the stream of remaining payments to a funding source. The funding source will receive its first payment 30 days following the closing of this discounted transaction. Your funders required yield is 13.5%.

   - How much will you receive from your funder? **$48,066.05**

   - The vendor payment was for $45,000. What is your total profit on this lease?
       <u>PV   -   Equip   +   2 advance payments</u>
       $48,066.05 - $45,000 + $1,344.24 + $1,344.24 = $5,754.53
       $5,754.53

2. Determine the monthly payment of the following transaction:

Lease Amount:	$34,000
Term:	60 Months
Advance Pmts:	3
Broker Fee:	8%
Security Deposit:	10%
Residual:	5%
Yield:	11.75%

   - What is the monthly payment? **$736.57**

   - What is the yield if you take away the security deposit? **9.79%**

3. You are a funding source reviewing the following lease proposal:

Lease Amount:	$15,000
Term:	36 Months
Broker Fee:	6%
Residual:	10%
Monthly Payment:	$485

   - You can choose to have either two advance payments or a 10% security deposit in place of the advance payments. Which structure will you choose to maximize your yield?

The $1,500 security deposit produces a 12.97% yield which is higher than the 12.18 % yield from the two advance payments. To maximize the yield, you will want the security deposit structure.

4. You are a Funding Source with a minimum yield requirement of 14.25%. You are asked to fund a 60-month lease with an equipment cost of $95,000. The lease payments are $2,150.00. The lease will have two advance payments and a 10% guaranteed residual to you. As part of the transaction you will need to pay a 5% brokerage fee. Are you able to meet your yield requirements and fund this lease?

   a. Yes
   b. **No** *(The Funding Source wants a yield of 14.25% and this example has a yield of only 13.79%)*
   c. Not enough information is provided to make the decision

5. The minimum number of variables that must be available to solve a present value problem for a desired unknown on a lease transaction without a residual is?

   a. 2
   b. **3** *(The minimum number of variables are yield, lease amount, payment and term. You need to know three of them to then solve for the fourth).*
   c. 4
   d. 5

6. Calculate the following items that are missing:

Lease Amount	Rate Factor	Lease Payment
$25,595	.02234	**$571.79**
$16,344	**.02856**	$466.78
$69,302.98	.03789	$2,625.89

7. You have a 48-month lease with payments of 1,340.00 and you have collected two advance payments. You are planning on keeping the residual yourself but selling to a Funding Source the stream of remaining payments. You have two Funding Sources that will buy the stream of payments from you. Bank A has a yield of 13.5% and bank B has a yield of 12.75%. Which Bank will give you the best return?

   a. Bank A
   b. **Bank B**

   - What is the dollar difference between the two banks? **The present value of bank A is $47,914.44 and the present value from bank B is $48,558.30. You get $643.86 more by selling to bank B.**

8. A Lessor has quoted a 60-month lease with first payment and a 15% security deposit in advance. The lease has a guaranteed 10% residual. As a part of this transaction the Lessor will pay a broker a 7% commission. The rate factor quoted was .023159. The lessee has countered the proposal with first and last payments in advance without the security deposit. The Lessor has decided to accept the Lessee's proposal and will keep the yield the same and the broker fee will remain at 7%. What rate factor does the Lessor quote to the broker that will include the broker fee and insure the Lessor maintains its yield requirements?

   a. .025324
   b. **.024929**
   c. .023327
   d. .024601

   First solve for the yield on the initial proposal using any lease amount ($10,000 in this example).

Lease Amount	*$10,000*
Advance Payment	*1*
Security Deposit	*$1,500*
Residual	*$1,000*
Commission	*$700*
Payment	*$10,000 x .023159 = $231.59*
Solve for Yield	*17.19%*

   Then change the advance payments from 1 to 2 and the security deposit from $1,500 to $0 and solve for the new payment amount which ends up being $249.29. Then divide $249.29 by the lease amount of $10,000 to get a rate factor of .02429.

9. What is the rate factor for the following variables?

   Yield – 18%
   Advance Payments – 2
   Term – 36 months
   Rate Factor **.03511** *(Use $1.00 for the lease amount to determine the payment)*

10. You have a lease with four advance payments. Which scheduled payments do these advance payments account for?

    a. First four payments
    b. First two payments and last two payments
    c. **First payment and last three payments**
    d. Last four payments

11. Compute the monthly lease payment to achieve a yield of 18.5% given the following set of assumptions.

Equipment Cost:	$175,000
Broker Fee:	3.0%
Security Deposit:	$8,750
Residual	10%
Term	60 Months
Advance Payments	2
Monthly Payment	**$4,183.73**

12. What is the yield for the following lease terms?

Term:	60 Months
Advance Payments:	3
Equipment Cost:	74,160.54
Payment:	$1,666.40
Residual:	5%
Broker Fee:	6%
Yield:	**12.34%**

13. What is the monthly payment for the following lease terms?

Term:	36 Months
Advance Payments:	2
Equipment Cost:	$34,017.24
Yield	19.25%
Residual:	10%
Broker Fee:	$3,000
Security Deposit:	10%
Monthly Payment:	**$1,198.41**

14. With this same lease, what would the yield be if the lease was done without the security deposit? **16.16%**