

## SOLUTIONS

## Learning Goal 4

## Reinforcement Problems

## LG 4-1.

Information Example	The key information type is . . .	To determine the cost used up, you need to . . .												
1. On April 1, Madison Company prepaid \$1,750 for five service repair calls. On June 30, the trial balance shows a balance of \$1,750 in the Prepaid Repairs account, after three repair jobs have been done.	the cost per unit of the asset (five service jobs)	calculate the cost per unit of the asset (in units of jobs)												
2. The balance of the Spare Parts Supplies account on the trial balance is \$14,550. A physical count shows \$1,500 of the supplies remaining at year end.	the asset cost remaining	subtract the asset cost remaining from the unadjusted balance of the Prepaid Expense account												
3. On October 1, Fox Valley Company purchased a 12-month fire insurance policy for \$9,000. The year-end trial balance on January 31 shows \$9,000 of Prepaid Fire Insurance. The trial balance also shows \$2,500 of Insurance Expense, which does not include the cost of any fire insurance.	the cost per unit of the asset (12 months)	calculate the cost per unit of the asset (units of time)												
4. Wisconsin Grand Hotel provides each guest with a complimentary bar of soap. The unadjusted trial balance shows \$17,500 of soap supplies at year end. At year end, a physical count shows \$3,500 of soap supplies actually remaining. (Soap Expense is recorded only at year end.)	the asset cost remaining	subtract the asset cost remaining from the unadjusted balance of the Prepaid Expense account												
<p>5. Blue Mountain Corporation has a December 31 year end. On December 31, year end, an analysis of the unadjusted balance of the Prepaid Insurance shows:</p> <table border="1" data-bbox="256 1311 863 1466"> <thead> <tr> <th><i>Policy Type</i></th> <th><i>Date Purchased</i></th> <th><i>Amount</i></th> </tr> </thead> <tbody> <tr> <td>Fire</td> <td>July 10</td> <td>\$5,000</td> </tr> <tr> <td>Liability</td> <td>May 1</td> <td>\$2,100</td> </tr> <tr> <td>Flood</td> <td>Oct. 20</td> <td>\$7,500</td> </tr> </tbody> </table> <p>The insurance agent verifies that \$900 worth of the fire policy is still in force, as well as \$1,000 of the liability policy and \$2,750 of the flood policy.</p>	<i>Policy Type</i>	<i>Date Purchased</i>	<i>Amount</i>	Fire	July 10	\$5,000	Liability	May 1	\$2,100	Flood	Oct. 20	\$7,500	the asset cost actually remaining	subtract the asset cost remaining from the unadjusted balance of the Prepaid Expense account
<i>Policy Type</i>	<i>Date Purchased</i>	<i>Amount</i>												
Fire	July 10	\$5,000												
Liability	May 1	\$2,100												
Flood	Oct. 20	\$7,500												
6. On June 30, year end, the trial balance of Milwaukee Company showed an ending balance of \$2,110 in the Prepaid Rent account. This represents the rent for May and June. \$10,550 of rent expense is showing in the final trial balance.	the asset cost used up	interpret the statement to determine the portion that is used up												

## SOLUTIONS

## Learning Goal 4, continued

Reinforcement Problems, *continued*LG 4-1, *continued*

Information Example	The key information type is . . .	To determine the cost used up, you need to . . .								
<p>7. On December 31, year end, the Prepaid Insurance account of Moraine Park Company shows:</p> <table border="1" data-bbox="188 617 667 729"> <thead> <tr> <th colspan="2">Prepaid Insurance</th> </tr> </thead> <tbody> <tr> <td>Beg. Bal. Jan. 1</td> <td>2,500</td> </tr> <tr> <td>Oct. 1</td> <td>9,000</td> </tr> </tbody> </table> <p>The beginning balance is the unexpired part of a one-year policy purchased in the prior year. The October amount is for a three-year policy.</p>	Prepaid Insurance		Beg. Bal. Jan. 1	2,500	Oct. 1	9,000	<p><i>Combination:</i> cost used up and cost per unit</p> <ul style="list-style-type: none"> <li>■ One-year policy was bought last year, so it will be completely used up in this year.</li> <li>■ Three months of the Oct. 1 payment have been used up.</li> </ul>	<ul style="list-style-type: none"> <li>■ 100% of the first policy</li> <li>■ Calculate the expense per month.</li> </ul> <p><i>Note:</i> You could also see this as a “portion” of 3/12.</p>		
Prepaid Insurance										
Beg. Bal. Jan. 1	2,500									
Oct. 1	9,000									
<p>8. At the beginning of the year, the Prepaid Rent account had a balance of \$1,300, and during the year \$10,700 of additional prepayments were made. The amount of Prepaid Rent in force at year end is \$3,000.</p>	<p>The asset cost remaining</p>	<p>Subtract the asset cost remaining from the unadjusted balance of the Prepaid Expense account.</p>								
<p>9. At year end, the Prepaid Rent account balance shows as \$12,000. 75% of this balance expired during the year. The remaining 25% will be used next year.</p>	<p>The asset cost used up</p>	<p>Determine portion (75%) used up.</p>								
<p>10. The June 30 trial balance of Waukesha Company shows prepaid interest of \$5,000 for money borrowed on June 1. Interest expense is incurred at \$1,500 per month. No interest expense has been recorded.</p>	<p>The cost per unit of the asset (units of time)</p>	<p>Use the cost per unit of the asset. (\$1,500 per month is already calculated for you.)</p>								
<p>11. Springfield Company, which has a December 31 year end, shows the following in the Prepaid Advertising account:</p> <table border="1" data-bbox="268 1483 667 1628"> <thead> <tr> <th colspan="2">Prepaid Advertising</th> </tr> </thead> <tbody> <tr> <td>Jan. 1</td> <td>2,000</td> </tr> <tr> <td>May 1</td> <td>4,500</td> </tr> <tr> <td>Nov. 1</td> <td>4,500</td> </tr> </tbody> </table> <p>The advertising is purchased and consumed semiannually.</p>	Prepaid Advertising		Jan. 1	2,000	May 1	4,500	Nov. 1	4,500	<p><i>Combination:</i> cost used up and cost per unit</p> <ul style="list-style-type: none"> <li>■ Six-month prepayments from Jan. 1 and May 1 are fully used up by December 31.</li> <li>■ Cost per unit (month) of Nov. 1 prepayment</li> </ul>	<p>By interpreting the “purchased semiannually” information, the amounts used up are:</p> <ul style="list-style-type: none"> <li>■ All of the beginning balance</li> <li>■ All of the May 1 purchase</li> <li>■ Two months of the Nov. 1 purchase</li> </ul> <p><i>Note:</i> You could also see this as a “portion” of 2/12.</p>
Prepaid Advertising										
Jan. 1	2,000									
May 1	4,500									
Nov. 1	4,500									





## SOLUTIONS

## Learning Goal 4, continued

Reinforcement Problems, *continued*LG 4-2, *continued*

5.

Calculate the Amount of the Adjustment		Make the Journal Entry	
Prepaid insurance cost on trial balance:	\$14,600	Insurance Expense	9,950
Actual prepaid insurance remaining:	\$ 4,650	Prepaid Insurance	9,950
Prepaid insurance used up:	\$ 9,950	A ↓ = L + OE ↓	
		Prepaid Insurance	Insurance Expense
		-9,950	+9,950

Determine the New Balances of the Accounts Affected			
Prepaid Insurance		Insurance Expense	
14,600		-0-	
	9,950	9,950	
<u>4,650</u>		<u>9,950</u>	

6.

Calculate the Amount of the Adjustment		Make the Journal Entry	
<b>Cost used up:</b>		Rent Expense	2,110
You are told that the \$2,110 is for the months of May and June.		Prepaid Rent	2,110
So the Prepaid Rent had been fully used up as of June 30. The full \$2,110 is the amount of the adjustment.		A ↓ = L + OE ↓	
		Prepaid Rent	Rent Expense
		-2,110	+2,110

Determine the New Balances of the Accounts Affected			
Prepaid Rent		Rent Expense	
2,110		10,550	
	2,110	2,110	
<u>-0-</u>		<u>12,660</u>	

## SOLUTIONS

### Learning Goal 4, continued

#### Reinforcement Problems, continued

#### LG 4-2, continued

7.

Calculate the Amount of the Adjustment	Make the Journal Entry																														
<p><b>January 1 balance:</b> All of this amount is used up in the current year (purchased in the prior year, so less than 1 year is left): <span style="float: right;">\$2,500</span></p> <p><b>October 1 purchase:</b>                      Amount per month:  <math>\\$9,000/36 = \\$250</math> per month <math>\times 3</math> <span style="float: right;"><u>\$750</u></span>                      Total Prepaid Insurance used up: <span style="float: right;"><u>\$3,250</u></span></p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Insurance Expense</td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: right;">3,250</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td style="padding-left: 20px;">Prepaid Insurance</td> <td></td> <td></td> <td style="text-align: right;">3,250</td> <td></td> <td></td> </tr> <tr> <td colspan="6" style="text-align: center; padding: 5px 0;">A ↓ = L + OE ↓</td> </tr> <tr> <td style="padding-left: 20px;">Prepaid Insurance</td> <td></td> <td></td> <td></td> <td style="text-align: right;">Insurance Expense</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">-3,250</td> <td></td> <td></td> <td style="text-align: right;">+3,250</td> </tr> </table>	Insurance Expense		3,250				Prepaid Insurance			3,250			A ↓ = L + OE ↓						Prepaid Insurance				Insurance Expense				-3,250			+3,250
Insurance Expense		3,250																													
Prepaid Insurance			3,250																												
A ↓ = L + OE ↓																															
Prepaid Insurance				Insurance Expense																											
		-3,250			+3,250																										

Determine the New Balances of the Accounts Affected			
Prepaid Insurance		Insurance Expense	
11,500		-0-	
	3,250		3,250
<u>8,250</u>		<u>3,250</u>	

8.

Calculate the Amount of the Adjustment	Make the Journal Entry																														
<p>Unadjusted balance at year end: <math>(1,300 + 10,700 - 0) = \\$12,000</math></p> <p>Prepaid Rent in force at year end: <span style="float: right;"><u>\$ 3,000</u></span></p> <p>Prepaid Rent used up: <span style="float: right;"><u>\$ 9,000</u></span></p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Rent Expense</td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: right;">9,000</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td style="padding-left: 20px;">Prepaid Rent</td> <td></td> <td></td> <td style="text-align: right;">9,000</td> <td></td> <td></td> </tr> <tr> <td colspan="6" style="text-align: center; padding: 5px 0;">A ↓ = L + OE ↓</td> </tr> <tr> <td style="padding-left: 20px;">Prepaid Rent</td> <td></td> <td></td> <td></td> <td style="text-align: right;">Rent Expense</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">-9,000</td> <td></td> <td></td> <td style="text-align: right;">+9,000</td> </tr> </table>	Rent Expense		9,000				Prepaid Rent			9,000			A ↓ = L + OE ↓						Prepaid Rent				Rent Expense				-9,000			+9,000
Rent Expense		9,000																													
Prepaid Rent			9,000																												
A ↓ = L + OE ↓																															
Prepaid Rent				Rent Expense																											
		-9,000			+9,000																										

Determine the New Balances of the Accounts Affected			
Prepaid Rent		Rent Expense	
12,000		-0-	
	9,000		9,000
<u>3,000</u>		<u>9,000</u>	

## SOLUTIONS

## Learning Goal 4, continued

Reinforcement Problems, *continued*LG 4-2, *continued*

9.

Calculate the Amount of the Adjustment	Make the Journal Entry															
<p>You can calculate that \$9,000 is the cost of Prepaid Rent that has been consumed. This is the amount of the adjustment.</p> $\$12,000 \times .75 = \$9,000$	<table> <tr> <td>Rent Expense</td> <td>9,000</td> <td></td> </tr> <tr> <td>Prepaid Rent</td> <td></td> <td>9,000</td> </tr> </table>	Rent Expense	9,000		Prepaid Rent		9,000									
	Rent Expense	9,000														
	Prepaid Rent		9,000													
<table> <tr> <td>A ↓</td> <td>=</td> <td>L</td> <td>+</td> <td>OE ↓</td> </tr> <tr> <td>Prepaid Rent</td> <td></td> <td></td> <td></td> <td>Rent Expense</td> </tr> <tr> <td>-9,000</td> <td></td> <td></td> <td></td> <td>+9,000</td> </tr> </table>	A ↓	=	L	+	OE ↓	Prepaid Rent				Rent Expense	-9,000				+9,000	
A ↓	=	L	+	OE ↓												
Prepaid Rent				Rent Expense												
-9,000				+9,000												

Determine the New Balances of the Accounts Affected			
Prepaid Rent		Rent Expense	
12,000		-0-	
	9,000	9,000	
<u>3,000</u>		<u>9,000</u>	

10.

Calculate the Amount of the Adjustment	Make the Journal Entry															
<p><b>Cost per month:</b> \$1,500 per month is already calculated for you</p> <p><b>Amount used up:</b> \$1,500 × 1 mo. = \$1,500 total expense (June 1–June 30 is 1 month in the current accounting period that ends on June 30.)</p>	<table> <tr> <td>June 30</td> <td>Interest Expense</td> <td>1,500</td> <td></td> </tr> <tr> <td></td> <td>Prepaid Interest</td> <td></td> <td>1,500</td> </tr> </table>	June 30	Interest Expense	1,500			Prepaid Interest		1,500							
	June 30	Interest Expense	1,500													
		Prepaid Interest		1,500												
<table> <tr> <td>A ↓</td> <td>=</td> <td>L</td> <td>+</td> <td>OE ↓</td> </tr> <tr> <td>Prepaid Interest</td> <td></td> <td></td> <td></td> <td>Interest Expense</td> </tr> <tr> <td>-1,500</td> <td></td> <td></td> <td></td> <td>+1,500</td> </tr> </table>	A ↓	=	L	+	OE ↓	Prepaid Interest				Interest Expense	-1,500				+1,500	
A ↓	=	L	+	OE ↓												
Prepaid Interest				Interest Expense												
-1,500				+1,500												

Determine the New Balances of the Accounts Affected			
Prepaid Interest		Interest Expense	
5,000		-0-	
	1,500	1,500	
<u>3,500</u>		<u>1,500</u>	

