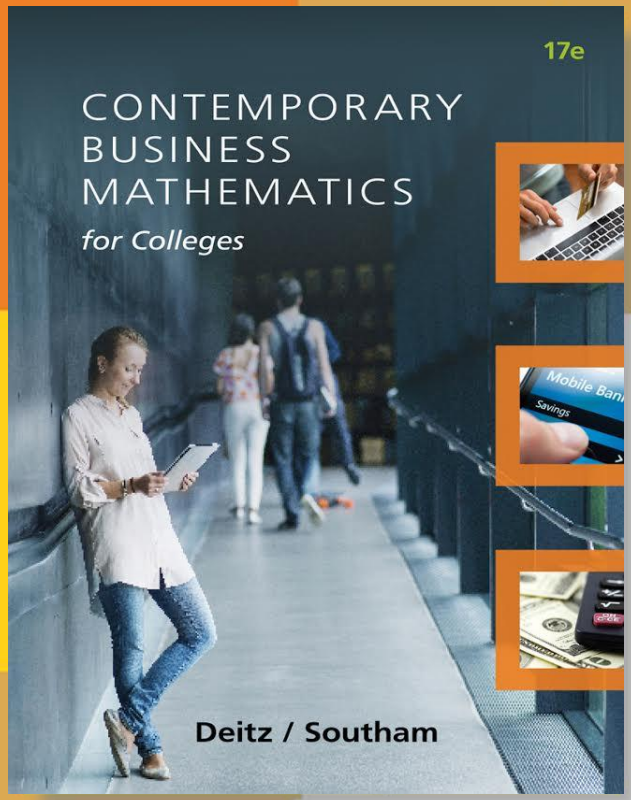


6

Commissions

Prepared by Johnny Howard

Learning Objectives

By studying this chapter and completing all assignments, you will be able to:

Learning Objective 1 Compute sales commissions and gross pay.

Learning Objective 2 Compute graduated sales commissions.

Learning Objective 3 Compute sales and purchases for principals.

STEPS to Compute Commission and Total Pay

1. Multiply the commission rate by the amount sold to get the commission amount.
2. If there is a salary, add it to the commission amount to get the total gross pay.

Learning Objective 1

EXAMPLE A

Judy Ahlquist sells yachts and marine equipment for Bay Area Marine Sales. She receives a base salary of $5,000 per month and earns a commission that is 2% of the value of all boating equipment that she sells during the month. Find her commission and total pay during September, a month in which she sold $132,000 worth of equipment.

STEP 1 $2\% \times \$132{,}000 = 0.02 \times \$132{,}000 = \$2{,}640$ commission

STEP 2 $\$2{,}640$ commission $+ \$5{,}000$ base salary $= \$7{,}640$ total pay

STEPS to Compute Commission When a Sale Involves Returned Goods

1. Subtract the value of the returned goods (or canceled orders) from the total sales to determine net sales.
2. Multiply the commission rate by net sales to get the commission amount.

Learning Objective 1

EXAMPLE B

Carl Gowey is a salesperson for Englewood Office Supply. He works on a commission-only basis—he receives a commission of 3.5% on his weekly sales, but no base salary. What are Carl's commission and total pay during a week when he sells $44,000 worth of office products, but one of his customers cancels an order for $5,000?

STEP 1 $44,000 − $5,000 = $39,000 net sales

STEP 2 3.5% × $39,000 = 0.035 × $39,000 = $1,365 commission

Total Pay = $1,365, because he is paid on a commission-only basis

STEPS to Compute Commission Under a Graduated Rate Plan

1. Compute the dollar amount at each rate level by using subtraction.
2. Multiply each level's sales dollars by the level's commission rate.
3. Add the products computed in Step 2 to determine the total commission.

Learning Objective 2

EXAMPLE C

In addition to a salary, Donna Wu has a monthly commission plan under which she receives 2% on the first $40,000 of sales during the month and 3% on sales above $40,000. If Donna has sales of $75,000 during May, compute her commission for May.

STEP 1

$75,000 total sales
− 40,000 at 2%
$35,000 at 3%

STEP 2

$40,000 × 0.02 = $ 800
35,000 × 0.03 = + 1,050

STEP 3

Total commission = $1,850

EXAMPLE D

Assume that Donna has a monthly commission plan under which she receives 2% on the first $40,000 of sales during the month, 3% on sales from $40,000 to $80,000, and 4% on all sales over $80,000. If Donna has sales of $126,000 during April compute her commission for April.

STEP 1

$126,000 total sales
− 40,000 at 2%
$ 86,000
− 40,000 at 3%
$ 46,000 at 4%

STEP 2

$40,000 × 0.02 = $ 800
40,000 × 0.03 = 1,200
46,000 × 0.04 = + 1,840

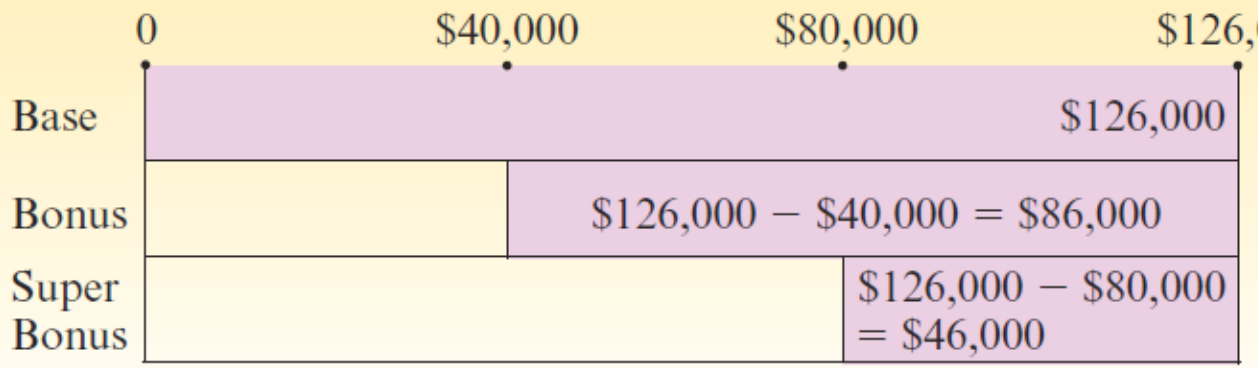
STEP 3

Total commission = $3,840

The same graduated incentive plan can be defined in terms of bonus rates. The calculations are similar.

EXAMPLE E

Les Flake has a monthly commission plan under which he receives 2% on all sales during the month. If Les has sales above $40,000, he receives a bonus of 1% of everything over $40,000. If he sells more than $80,000, he receives a "super bonus" of an additional 1% of everything over $80,000. What was Les's commission for a month during which he sold $126,000?



$0.02 \times \$126{,}000 = \$2{,}520$

$0.01 \times \$\ 86{,}000 = \quad 860$

$0.01 \times \$\ 46{,}000 = \underline{+\ 460}$

Total commission (add the three commission amounts) = $3,840

Observe that both example D and example E had a total commission of $3,840 on sales of $126,000. The two graduated incentive plans are identical except for the manner in which they are defined and calculated.

Computing Sales and Purchases for Principals

- A producer (consignor) may send goods on consignment to a consignee/agent (commission merchant) for sale at the best possible price.
- Gross proceeds is the amount the commission merchant gets for the consignment when sold.
- The commission amount returned to the consignor by the consignee is generally a certain percentage of the gross proceeds.

Learning Objective 3

EXAMPLE F

Karen Recht, owner of Willowbrook Farms, has been trying to sell a used livestock truck and a used tractor. Unsuccessful after 3 months, Ms. Recht consigns the items to Alma Equipment Brokers. They agree on commission rates of 6% of the gross proceeds from the truck and 9% of the gross proceeds from the tractor. Alma sells the truck for $42,500 and the tractor for $78,600. Alma also pays $610 to deliver the truck and $835 to deliver the tractor. What are the net proceeds due Willowbrook Farms from the sale of the equipment?

Truck:	Commission: 0.06 × $42,500 =	$2,550	Gross proceeds:	$42,500
	Freight:	+ 610	less charges	− 3,160
	Total charges	$3,160	Net Proceeds:	$39,340
Tractor:	Commission: 0.09 × $78,600 =	$7,074	Gross proceeds:	$78,600
	Freight:	+ 835	less charges	− 7,909
	Total charges	$7,909	Net proceeds:	$70,691

$39,340 + $70,691 = $110,031 Total Net Proceeds

Figure 6.1 Account Sales

ACME EQUIPMENT BROKERS

August 16, 20-- NO. 67324

309 Sule Road, Wilbraham, MA 01095-2073

NAME Willowbrook Farms
ADDRESS 127 N. Kaye
Albany, GA 31704-5606

BELOW ARE ACCOUNT SALES OF Consignment No. 876
RECEIVED August 1, 20--
and sold for account of Same

DATE	CHARGES	AMOUNT	DATE	SALES	AMOUNT
Aug. 16	Freight (truck)	$ 610	Aug. 10	Truck	$42,500
	6% Commission (truck)	2,550			
	Net proceeds (truck)	39,340	13	Tractor	78,600
				Gross proceeds	$121,100
16	Freight(tractor)	835			
	9% Commission (tractor)	7,074			
	Net proceeds (tractor)	70,691			
	Total	$121,100			

EXAMPLE G

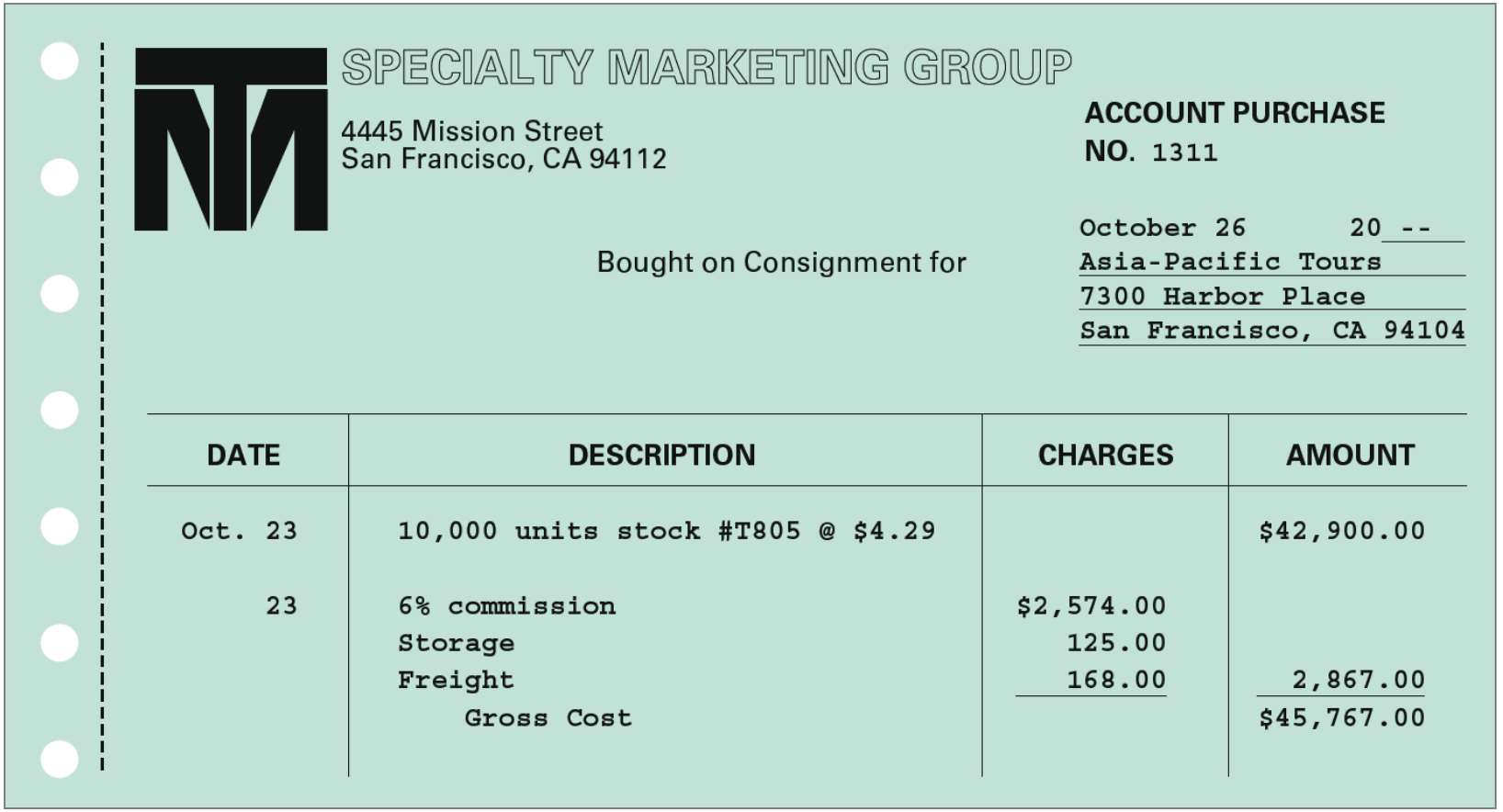
Asia-Pacific Tours commissioned Specialty Marketing Group to purchase 10,000 vinyl travel bags that will be labeled with Asia-Pacific's logo and used as promotional items. For this size order, Specialty Marketing purchased the bags for $4.29 each. Charges included the commission, which was 6% of the prime cost; storage, $125; and freight, $168. What is the gross cost that Asia-Pacific should pay to Specialty Marketing?

$ 4.29		$42,900	prime cost
× 10,000	units	× 0.06	
$ 42,900	prime cost	$ 2,574	commission

$2,574 commission + $125 storage + $168 freight = $2,867 charges

$42,900 prime cost + $2,867 charges = $45,767 gross cost

Figure 6.2 Account Purchase



SPECIALTY MARKETING GROUP

4445 Mission Street
San Francisco, CA 94112

ACCOUNT PURCHASE
NO. 1311

Bought on Consignment for

October 26 20 --
Asia-Pacific Tours
7300 Harbor Place
San Francisco, CA 94104

DATE	DESCRIPTION	CHARGES	AMOUNT
Oct. 23	10,000 units stock #T805 @ $4.29		$42,900.00
23	6% commission	$2,574.00	
	Storage	125.00	
	Freight	168.00	2,867.00
	Gross Cost		$45,767.00

Chapter Terms for Review

account purchase
account sales
broker
charges
commission
commission merchant
consignee
consignment
consignor
graduated commission rates
gross cost
gross proceeds
gross sales
net proceeds
net sales
prime cost
principal

Assignment 6.1: Commission

A **Find the commission and the total gross pay.**

Employee	Monthly Salary	Commission Rate	Monthly Sales	Commission	Gross Pay
1. Cornelius, Jane	$ 0	8%	$84,500	$6,760	$6,760
$0.08 \times \$84{,}500 = \$6{,}760 + 0 = \$6{,}760$					
2. Conway, Sue	4,000	3%	$165,600	$4,968	$8,968
$0.03 \times \$165{,}600 = \$4{,}968 + \$4{,}000 = \$8{,}968$					
3. Aguire, Luis	3,750	5%	$42,000	$2,100	$5,850
$0.05 \times \$42{,}000 = \$2{,}100 + \$3{,}750 = \$5{,}850$					
4. Brandon, Carol	3,275	3.5%	$94,600	$3,311	$6,586
$0.035 \times \$94{,}600 = \$3{,}311 + \$3{,}275 = \$6{,}586$					
5. Rogerro, George	1,800	6%	$64,000	$3,840	$5,640
$0.06 \times \$64{,}000 = \$3{,}840 + \$1{,}800 = \$5{,}640$					
6. Wang, Jonathan	1,500	8%	$86,000	$6,880	$8,380
$0.08 \times \$86{,}000 = \$6{,}880 + \$1{,}500 = \$8{,}380$					

Assignment 6.1: Commission

B **Compute the total commission for the following commission payment plans.**

Graduated Commission Rates	Sales	Commission	
7. 3% on sales to \$60,000 6% on sales above \$60,000	\$137,000	\$6,420	$0.03 \times \$60{,}000 = \$1{,}800$ $0.06 \times 77{,}000 = +4{,}620$ \$6,420
8. 1% on sales to \$200,000 2% on sales above \$200,000	\$394,000	\$5,880	$0.01 \times \$200{,}000 = \$2{,}000$ $0.02 \times 194{,}000 = +3{,}880$ \$5,880
9. 3% on sales to \$80,000 5% on sales above \$80,000	\$174,000	\$7,100	$0.03 \times \$80{,}000 = \$2{,}400$ $0.05 \times 94{,}000 = +4{,}700$ \$7,100
10. 2% on sales to \$85,000 3% on sales from \$85,000 to \$170,000 4% on sales above \$170,000	\$230,000	\$4,950	$0.02 \times \$85{,}000 = \$1{,}700$ $0.03 \times 85{,}000 = 2{,}550$ $0.04 \times 60{,}000 = +2{,}400$ \$6,650
11. 3% on sales to \$50,000 4% on sales from \$50,000 to \$100,000 5% on sales above \$100,000	\$128,000	\$4,900	$0.03 \times \$50{,}000 = \$1{,}500$ $0.04 \times 50{,}000 = 2{,}000$ $0.05 \times 28{,}000 = +1{,}400$ \$4,900

Assignment 6.1: Commission

B **Compute the total commission for the following commission payment plans. (cont'd)**

12. 2% on sales to $80,000
3% on sales from $80,000 to $160,000
4% on sales above $160,000

$156,400

$3,892

$0.02 \times \$80{,}000 = \$1{,}600$
$0.03 \times 76{,}400 = +2{,}292$
$\$3{,}892$

Assignment 6.1: Commission

C **Patricia Wellington is a commission merchant. She charges different commission rates to sell different types of merchandise. During May, she completed the following consignment sales for consignors. Find Patricia's commission on each sale and the net proceeds sent to each consignor.**

	Gross Sales	Comm. Rate	Commission	Local Delivery	Storage	Air Freight	Net Proceeds
13.	$38,400	3%	$1,152	$ 68	$ 0	$183	$36,997
	$38,400 × 0.03			$38,400 − $1,152 − $68 − $183			
14.	$2,460	5%	$123	72	75	0	$2,190
	$2,460 × 0.05			$2,460 − $123 − $72 − $75			
15.	$8,400	6%	$504	284	0	0	$7,612
	$8,400 × 0.06			$8,400 − $504 − $284			
16.	$14,625	4%	$585	0	0	137	$13,903
	$14,625 × 0.04			$14,625 − $585 − $137			
17.	$14,100	7%	$987	75	85	112	$12,841
	$14,100 × 0.07			$14,100 − $987 − $75 − $85 − $112			

Assignment 6.1: Commission

D **Luis Castillo, a commission merchant in Dallas, buys merchandise exclusively for principals. Listed below are five recent transactions. Compute Luis' commission on each purchase and the gross cost.**

	Prime Cost	Comm. Rate	Commission	Local Delivery	Storage	Air Freight	Gross Cost
18.	$18,850	6%	$1,131	$93	$ 0	$152	$20,226
	$18,850 × 0.06			$18,850 + $1,131 + $93 + $152			
19.	$4,900	11%	$539	0	0	195	$5,634
	$4,900 × 0.11			$4,900 + $539 + $195			
20.	$7,280	7.5%	$546	43	75	94	$8,038
	$7,280 × 0.075			$7,280 + $546 + $43 + $75 + $94			
21.	$4,850	8%	$388	0	110	108	$5,456
	$4,850 × 0.08			$4,850 + $388 + $110 + $108			
22.	$31,600	9.25%	$2,923	65	80	107	$34,775
	$31,600 × 0.0925			$31,600 + $2,923 + $65 + $80 + $107			

Assignment 6.2: Applications with Commission

A **Solve each of the following business application problems involving salespeople who are paid partly or entirely on a commission basis. Solve the problems in order, because some of the questions are sequential.**

1. Sa-Lei Loi sells memberships to an athletic club. She receives a monthly salary of $2,150 plus a commission of 15% on new membership fees. What was Sa-Lei's monthly pay for May, when she sold new memberships valued at $27,500? $6,275

$0.15 \times \$27{,}500 = \$4{,}125$ commission
$+2{,}150$ salary
$\$6{,}275$ monthly pay

2. Syble Washington sells commercial restaurant supplies and equipment. She is paid on a commission-only basis. She receives 3% for her sales up to $75,000. For the next $85,000 of sales, she is paid 4%, and for any sales above $160,000 she is paid 5%. How much commission would Maria earn in a month when her sales were $186,000? $6,950

$0.03 \times \$75{,}000 = \$2{,}250$
$0.04 \times \$85{,}000 = 3{,}400$
$0.05 \times \$26{,}000 = 1{,}300$
$\$6{,}950$ commission

Assignment 6.2: Applications with Commission

A **Solve each of the following business application problems involving salespeople who are paid partly or entirely on a commission basis. Solve the problems in order, because some of the questions are sequential. (cont'd)**

3. Syble Washington (problem 2) is not paid commission on any restaurant supplies or equipment that are later returned. If an item is returned, its price is deducted from Syble's total sales to get her net sales. The commission-only rate is applied to her net sales. Suppose that Syble sold merchandise worth $186,000 but that $33,000 of that was later returned. What would be Syble's commission on net sales? $5,370

$186,000	total sales	0.03 × $75,000 = $2,250	
−33,000	returns	0.04 × $78,000 = $3,120	
$153,000	net sales	$5,370	commission

4. Luisa Gomes works for Southeast Appliance Mart. She receives a biweekly salary of $1,500 for which she must sell $20,000 worth of appliances. She also receives a commission of 4% on net sales above $20,000. What will be Luisa's pay for two weeks when her net appliance sales were $42,000? $2,380

$42,000	net sales	0.04 × $22,000 =	$ 880	commission
−20,000			+1,500	salary
$22,000	commission sales		$2,380	total pay

Assignment 6.2: Applications with Commission

A **Solve each of the following business application problems involving salespeople who are paid partly or entirely on a commission basis. Solve the problems in order, because some of the questions are sequential. (cont'd)**

5. Southeast Appliance Mart (problem 4) offers service contracts with all appliance sales. To encourage salespeople such as Luisa to sell more service contracts, the company pays a commission of 20% on all service contracts. What will be her total pay for two weeks when she sells $42,000 worth of appliances and $1,200 worth of service contracts? $2,620

$0.20 \times \$\ 1{,}200 = \$\ \ 240$ commission on service contracts
$0.04 \times \$22{,}000 = \ \ \ 880$ commission on appliances
$+1{,}500$ salary
$\$\ 2{,}620$ total pay

6. Samir Pesah is a stockbroker for an investment firm that pays Samir a 0.6% commission on all the stocks that he buys and sells for his clients. What will be Samir's commission on 1,200 shares of Apple stock that is selling for $475.50 per share? $3,423.60

$1{,}200 \times \$475.50 = \$570{,}600$ $0.006 \times \$570{,}600 = \$3{,}423.60$ commission

Assignment 6.2: Applications with Commission

A **Solve each of the following business application problems involving salespeople who are paid partly or entirely on a commission basis. Solve the problems in order, because some of the questions are sequential. (cont'd)**

7. Michelle Navarra works in telemarketing. Her job is to make telephone calls from a computerized list of names and try to convince people to make an appointment with a life insurance salesperson. Michelle receives 40¢ for each completed telephone call, $7.00 for each appointment made and kept, and 1% of any initial revenue that results from the appointment. How much would Michelle earn if she completed 968 calls, 153 persons made and kept appointments, and $37,600 in revenue resulted from the appointments? $1,834.20

$968 \times \$0.40$	=	$ 387.20	telephone calls
$153 \times \$7.00$	=	1,071.00	appointments
$0.01 \times \$37,600$	=	+ 376.00	revenue percentage
		$1,834.20	total earnings

Assignment 6.2: Applications with Commission

B **Solve each of the following business applications about consignment sales and commission merchants.**

8. Darleen Bassey is a commission merchant who charges a 12% commission to sell antique furniture from her showroom. Gale Holfert owns antique furniture, which he transports to her showroom where Darleen sells it for $11,750. Gale agrees to pay Darleen $670 to have the furniture delivered to the buyer from the showroom. What will be Gale's net proceeds from the sale? $9,670

Commission: $0.12 \times \$11{,}750 = \$1{,}410$

Net proceeds: $\$11{,}750 - \$1{,}410 - \$670 = \$9{,}670$

9. Suppose, in problem 8, that payment of the $670 delivery expense was Darleen's responsibility instead of Gale's. Then what would be Darleen's net earnings from the sale? $740

Commission: $0.12 \times \$11{,}750 = \$1{,}410$

Less delivery expense: -670

$\$ \ 740$

10. Nancy Duncan makes artistic weavings that are used as wall hangings. She sells her weavings primarily at open-air art shows and street fairs through her agent, Ruth Nielsen. Ruth charges 20% on all sales, plus the fees to operate the sales booths and transportation expenses. After selling at four art shows, Ruth had total sales of $43,750. Each art show charged a booth fee of $650, and Ruth's total transportation expenses were $867. What were Nancy's net proceeds? $31,133

Booth fees:	$4 \times \$750 = \$3{,}000$	$43,750
Transportation:	867	−12,617
Commission:	$0.20 \times \$43{,}750 = +8{,}750$	$31,133
Total costs:	$12,617	

Assignment 6.2: Applications with Commission

C **The following problems involve the purchase of a home.**

11. JoAnn Andrews has a condominium that she would like to sell and she asks real estate broker Jerry Weekly to sell it. Jerry, co-owner of Counts/Weekly Real Estate, advises JoAnn that she should be able to sell her condominium for $180,000 and the commission rate for selling it will be 6%. If the condominium sells for the expected price, what will be the total commission amount that JoAnn pays? $10,800

Commission: $0.06 \times \$180{,}000 = \$10{,}800$

12. See problem 11. To sell her condominium, JoAnn Andrews must also pay some additional fees for inspections, title insurance, and to record the sale. These fees total $3,500 and are added to the 6% commission. What will JoAnn's net proceeds be from the sale of her $180,000 condominium? $165,700

Commission:	$10,800	$180,000	
Fees	+ 3,500	− 14,300	
Total costs:	$14,300	$165,700	net proceeds