# **P2W Skills for Success**

**Activity Set 17: Cost Calculations** 



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### 17.1: Getting Started

#### What?

Calculating costs may include several calculations.





#### Why?

To see the complete cost of items

#### Who?

- ✓ Servers calculate the cost of customers' orders.
- ✓ Office managers use order forms showing prices and applicable taxes when they restock office supplies.
- ✓ Accounts payable clerks check the accuracy of invoices before processing payments.

### What's involved?

- Multiplying quantities and costs
- Calculating subtotals and totals
- Calculating taxes
- Calculating discounts

### How about you?

List some situations when you have calculated costs.

1.

2.

3.

4

5.

How comfortable are you using these skills?

 I need a lot of practice
 I'm very comfortable

 1
 2
 3
 4
 5
 6
 7
 8
 9
 10

Review the order form, then answer the questions below.

CUSTOMER: KAY WEGM	IAN	DATE: 11/29/20	TEL: 647	7-555-3236
DESCRIPTION	SIZE	PRICE (incl. tax)		COST
	☐ X-Large	\$44.00		
FRUIT TRAY	<b>✓</b> Large	\$36.00		
	Regular	\$30.00		
	☐ X-Large	\$42.00		
VEG TRAY	Large	\$34.00		
	<b>☑</b> Regular	\$28.00		
	☐ X-Large	\$40.00		
MEAT PLATTER	☐ Large	\$34.00		
	Regular	\$28.00		
	☐ X-Large	\$40.00		
MEAT AND CHEESE	☐ Large	\$34.00		
	<b>✓</b> Regular	\$28.00		
	☐ X-Large	\$40.00		
CHEESE AND CRACKERS	☐ Large	\$34.00		
	Regular	\$26.00		
	☐ Large	\$44.00		
ALL CHEESE PLATTER	<b>✓</b> Regular	\$34.00		
		Subtota	ı	
		Delivery	,	\$ 8.00
		Tota	ı	
SPECIAL INSTRUCTIONS: Drop off to 138 Maytree Ave, side door. If no one is home, ensure trays are well-wrapped.				
PICKUP DATE & TIME:		DELIVERY DATE & TIME:	12/13/20	12:00-3:00 PM
TOROT DATE & TITLE.				



- Who do you think uses an order form like this?
- Why do they use it?

#### Refer to the order form to answer the questions below.

1	What o	ciao i	c tha	voastable	travtha	customor	ic ord	larina?
Ι.	vviiaus	SIZE I	s trie	vegetable	: liay lile	customer	12 010	rennig:

- 2. How much does the meat and cheese platter cost that the customer ordered?
- 3. What is the most expensive item the customer is ordering?
- 4. What date is the order to be delivered?
- 5. Where should the order be delivered?
- 6. Who took down the customer's order?
- 7. Why is the pick-up date and time section left blank?
- 8. Fill in the costs, subtotal and total on the form.

Review the order form, then answer the questions below.

# STATIONERY & SUPPLIES ORDER FORM

	**For Business Mart orders only**						
Page #	Item #	Description	QTY	Unit Price	Total		
48	027-01	BOX LG. PAPER CLIPS	5	.80			
112	022-99	WRITING PADS - 8-1/2 X 11"	10	1.99			
141	961-03	FILE CABINET	1	269.90			
46	028-60	BOX PENCILS - MEDIUM	8	4.65			
				Delivery	5.00		
				Subtotal			
				Tax			
				Total	\$		



Compare this order form with others you have seen.

• What are the similarities and differences?

#### Refer to the order form to answer the questions below.

- 1. What is the least expensive item on the order form?
- 2. How much does the file cabinet cost?
- 3. How many boxes of pencils are being ordered?
- 4. What page of the catalogue are the writing pads found on?
- 5. What is the item number for the paper clips?
- 6. Fill in the line totals and subtotal.
- 7. Calculate and fill in the sales tax and total. Use the sales tax rate that applies in your province or territory.

#### Review the invoices, then answer the questions below.

Healthy Cupboa	Healthy Cupboard, Healthcare Facilities' Supplies INVOICE 01975				
Order date: December 7, 20		Bill to account: Lakeview 011-3			
Code	Description	Qty	Price	Cost	
012-1	antiseptic spray	3	23.50	70.50	
012-4	disinfecting hand wash	4	30.21	120.84	
016-4	large bandages		25.00	75.00	
016-2	medium bandages	3		65.01	
018-5	skin care lotion	4	17.06	68.24	
016-1	small bandages	5	17.00	85.00	
			TOTAL		

Healthy Cupboa	Healthy Cupboard, Healthcare Facilities' Supplies INVOICE 01980				
Order date: December 14, 20		Bill to account: Lakeview 011-3			
Code	Description	Qty	Price	Cost	
012-1	antiseptic spray	2	23.50	47.00	
012-4	disinfecting hand wash	3	30.21	90.63	
016-4	large bandages	3	25.00	75.00	
016-2	medium bandages	3		65.01	
018-5	skin care lotion	5	17.06	85.30	
016-1	small bandages	4	17.00	68.00	
			TOTAL	\$430.94	

Healthy Cupboa	Healthy Cupboard, Healthcare Facilities' Supplies INVOICE 01986				
Order date: December 24, 20		Bill to account: Lakeview 011-3			
Code	Description	Qty	Price	Cost	
012-1	antiseptic spray	3	23.50	70.50	
012-4	disinfecting hand wash	4	30.21	120.84	
016-4	large bandages	5	25.00	125.00	
016-2	medium bandages	3		65.01	
018-5	skin care lotion	4	17.06	68.24	
016-1	small bandages		17.00	119.00	
			TOTAL	\$568.59	



- Can you think of occupations in which workers prepare invoices?
- Who do you think reviews completed invoices?
- What purpose do invoices serve at work?
- What are the similarities and differences between order forms and invoices?

#### Refer to the invoices to answer the questions below.

- 1. What is the total amount of the December 7 invoice?
- 2. On December 7, how many packages of large bandages were ordered?
- 3. How much does one package of medium bandages cost?
- 4. On December 24, how many small bandages were ordered?
- 5. As a holiday offer, Healthy Cupboard plans to give Lakeview a 10% discount on the December 24 invoice. Calculate the discount Lakeview will receive.
- 6. On January 1<sup>st</sup>, the cost of antiseptic spray will decrease by \$5. How much will it cost to purchase 4 antiseptic sprays in January?
- 7. On January 1st, the cost of large bandages will increase by 20%. How much will one package cost in January?

Discounts and taxes	Discounts are often expressed as percentages. For example, sale prices are often displayed as a percentage off the regular price.  Tax rates are always expressed as percentages.
What are percentages?	Percent means out of 100 or "for every 100".  So, a 50% discount means that you save \$50 on every \$100.  And, a 15% tax rate means that you need to pay \$15 dollars in taxes for every \$100 you spend.
How do you calculate discounts and taxes?	<ol> <li>Convert the percentage to a decimal by either dividing the percent by 100 or by moving the decimal two places to the left.</li> <li>Multiply the cost of the item by the decimal value. The result is the amount of the discount or the amount of the taxes.</li> </ol>

#### **Example:**

The regular price of safety boots is \$160 and they are on sale for 30% off. The tax rate is 12%.

#### Here's how you calculate the sale price:

Sale price	\$112.00
<ol><li>Subtract the amount of the discount from the regular price to calculate the sale price.</li></ol>	\$160 - \$48 = \$112
<ol><li>Multiple the regular price by the decimal value to figure out the amount of the discount.</li></ol>	\$160 x .3 = \$48
1. Convert the percentage to a decimal.	30% = .3

#### Here's how you calculate the total with taxes:

Total with taxes	\$125.44
3. Add the amount of the taxes to the sale price to get the total	\$112 + \$13.44 = \$125.44
2. Multiple the sale price by the decimal value to figure out the amount of the taxes.	\$112 X .12 = \$13.44
1. Convert the percentage to a decimal.	12% = .12

#### 1. Practise converting percentages to decimals by completing the table below.

	Percentage	Decimal		Percentage	Decimal
a)	10%		f)	4%	
b)	20%		g)	8%	
c)	40%		h)	25%	
d)	80%		i)	42%	
e)	100%		j)	92%	

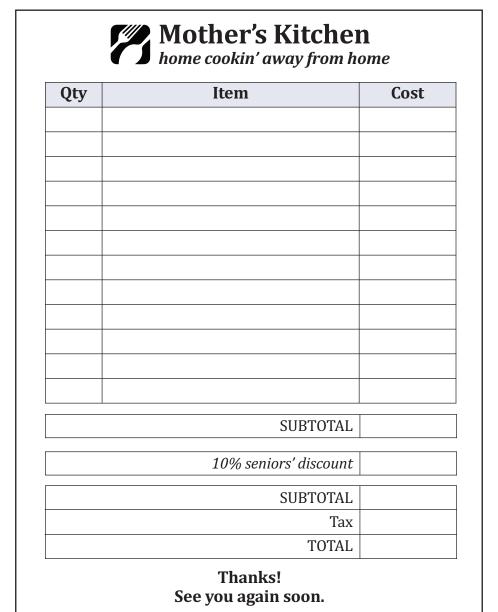
#### 2. Calculate the discounts and the sale prices.

	Item	Cost	Discount	Amount of discount	Sale price
a)	Desk	\$218	10%		
b)	Chair	\$159	25%		
c)	File cabinet	\$369	5%		
d)	Bookshelf	\$112	40%		

#### 3. Calculate taxes and the totals including taxes.

	Item	Cost	Tax Rate	Taxes	Total including taxes
a)	Box of paper	\$64	10%		
b)	Printer ink	\$55	8%		
c)	Set of notebooks	\$29	14%		
d)	Binder clips	\$6.20	15%		

Review the restaurant bill, then answer the questions below.





- How do restaurant servers use this document?
- How do customers use it?
- What forms look similar to this restaurant bill?

Work with a partner. Take turns playing the role of the customer and the role of the server.

- Customer: Review the menu and place your order.
- Server: Fill in the bill on the previous page and make the necessary calculations.

Mother's Kitchen 258 Main Street South	home cookin' away from home
Soup	Sandwiches
Soup of the day3.50 *Homemade chicken noodle4.25	All sandwiches come with coleslaw and pickle
Vegetable soup3.75	Ham on rye6.75
Cream of mushroom4.25	Tuna salad6.75
Clam chowder4.75	Chicken salad6.75
	Salmon salad7.25
Salad	*Turkey club7.50
Caesar salad(s) 4.50	
(l) 7.75	Desserts
Garden salad(s) 4.25	Blueberry cheesecake5.25
(1) 7.50	*Apple Pie4.75
Potato salad5.75	Ice cream
*Chef's salad8.25	strawberry, chocolate or vanilla
Mixed greens with cheese, ham and	1 scoop2.75
croutons	2 scoops3.50
Snacks	Beverages
French fries(s) 2.75	Soft drinks2.50
(m) 3.50	Water2.50
(l) 5.25	Coffee2.00
Onion rings 3.75	Tea2.00