

Building Math Bridges



Accounting Workbook for MAT 0097

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Unit One, Whole Numbers

Bob Taylor and Sons is a car dealership that has two salesmen, Joe and Brett. Total the sales amounts.

	Monday	Tuesday	Wednesday	Thursday	Friday
Joe	125	200	345	673	4,345
Brett	+ 95	+ 115	+ 550	+ 443	+ 5,334
TOTAL Sales	<hr/>				

Johnny Jameson is a CPA working on taxes for his clients. Calculate the refund by subtracting the amount withheld from the taxes owed for each.

	Client 1	Client 2	Client 3	Client 4	Client 5
Taxes owed	127	600	845	673	4,363
Amount withheld	- 25	- 250	- 550	- 443	- 2,334
REFUND	<hr/>				

- ✓ Billy is a payroll clerk at a local painting business. The painting business has two work teams. One work team brought in \$2,932 of business for the week and the other work team brought in \$3,291. What was the total business for the week?
- ✓ Antonio owns two businesses. One business owes \$550 in taxes and the other owes \$675. How much do the two businesses owe combined?
- ✓ Sharon is calculating her taxes. She has \$45,000 in salary income. She has to add \$2,500 in income from stocks. She gets to subtract \$4,500 in deductions. What is her net income?
- ✓ Bill's Gemstone Emporium has an accountant on staff named Judy. Judy is working on the financial statements for the month and must calculate the net income for the business. Judy shows income of four thousand four hundred fifty dollars. Subtract the total expenses, which are one thousand two hundred dollars, to get net income.
- ✓ Larry is calculating his taxes. He owed four hundred twenty-eight dollars in Texas state taxes but will get a refund of two hundred ten dollars from his Arizona state taxes. How much does he owe overall?

Unit Two, Whole Numbers

You are an accounting clerk for Benton and Associates, a business that manufactures staplers. The production cost data is listed for each product. Multiply to determine the total production cost for each line.

	Line A	Line B	Line C	Line D	Line E
Items produced	125	200	345	6,373	4,434
Cost per item	X 10	X 29	X 32	X 110	X 239
TOTAL Cost					

Rosa Hernandez is trying to determine her payroll costs for different periods of time. Use division to determine the costs per time period.

$$1200 \div 12$$

$$550 \div 4$$

$$4563 \div 6$$

$$1,367 \div 52$$

$$28,332 \div 52$$

- ✓ Benton and Associates has 15 employees. If each of the 15 employees work 30 hours in a given week, how many total payroll hours will be worked?
- ✓ If the employees of Benton and Associates make \$23 per hour and worked a total of 246 hours, how much is the total payroll?
- ✓ A diaper manufacturing company produces 1,492 diapers in an 8 hour shift. How many diapers is that per hour?
- ✓ A trucking company logged over 24,921 miles in a six-day workweek. How many miles per day were logged?
- ✓ Benton and Associates has 27 employees who work in 4 divisions. In a week, the 27 employees worked a total of 892 hours and were paid \$15 per hour. What is the total payroll for the week? What is the total payroll for each division?

Unit 3 The Meaning and Use of Fractions

Angie's Jewelry has a large collection of gems that are measured by the carat, like diamonds. Many times, she will sell emeralds and diamonds of different sizes together. Add the measurements below to determine the total carats for each sale.

	Line A	Line B	Line C	Line D	Line E
Emeralds	$\frac{2}{3}$	$\frac{2}{5}$	$\frac{7}{16}$	$2\frac{1}{4}$	$7\frac{3}{8}$
Diamonds	$+\frac{1}{3}$	$+\frac{3}{5}$	$+\frac{5}{8}$	$+\frac{3}{4}$	$+2\frac{1}{8}$
TOTAL Carats					

Angie's Jewelry allows customers to trade in their gems when purchasing new ones. Subtract the trade-in carats from the sale carats to determine the total carats.

	Line A	Line B	Line C	Line D	Line E
Sale Carats	$\frac{2}{3}$	$\frac{4}{5}$	$\frac{9}{16}$	$2\frac{1}{4}$	$7\frac{3}{8}$
Trade-in Carats	$-\frac{1}{3}$	$-\frac{3}{5}$	$-\frac{1}{16}$	$-\frac{3}{4}$	$-2\frac{1}{4}$
TOTAL Carats					

- ✓ Martha Steward stock (MSO) is trading at $14\frac{1}{2}$. Coca Cola stock (KO) is trading at $12\frac{1}{4}$. How much more is the MSO stock than the KO stock?
- ✓ Bennie worked $2\frac{1}{2}$ hours overtime on Thursday and $3\frac{3}{4}$ hours overtime on Friday. How much total overtime did he work?
- ✓ At Allied manufacturing, $342\frac{7}{8}$ units were produced on one production line and $412\frac{1}{5}$ on the second line. How many total units were produced?
- ✓ Buster's Building Materials allocated $500\frac{3}{4}$ board feet of lumber for a construction job. $15\frac{7}{8}$ board feet was waste. How many board feet were used?
- ✓ On a travel reimbursement form, an employee has listed travel of $23\frac{1}{2}$ miles, $45\frac{3}{4}$ miles, $11\frac{2}{5}$ miles and $19\frac{3}{16}$ miles. What are their total miles to be reimbursed?

Unit 4 Multiplication and Division of Fractions

Bob has a manufacturing business. On a series of jobs, he has allocated the costs of raw materials; some of the jobs are partially completed. Calculate the total job costs by multiplying the number of jobs completed by the amount of the total raw material costs allocated.

	Job A	Job B	Job C	Job D	Job E
Jobs completed	2/3	2/15	7/16	2	7
Raw Materials costs	X 1/3	X 4/15	X 5/9	X 3/4	X 2 1/5
TOTAL Costs					

As the accountant for Bob's denim manufacturing business, you must allocate the costs of cotton in tons by the predicted number of jobs (or parts of jobs) needing the cotton.

	Job A	Job B	Job C	Job D	Job E
Tons of cotton	2/3	3	17	1/4	7
Number of jobs	÷ 1/3	÷ 4/15	÷ 5/8	÷ 3/4	÷ 2 3/4
TOTAL tons per job					

- ✓ Sarah needs a $7 \frac{1}{2}$ foot piece of metal that is sold by the $\frac{1}{2}$ foot unit. How many units will she need to buy?
- ✓ Gregor has a 110-acre field that needs lime spread on it at a $1 \frac{1}{2}$ tons per acre rate. How many tons of lime will Gregor need?
- ✓ In Olivia's production line, she needs $7 \frac{1}{8}$ feet of copper wiring per job. She has $4 \frac{3}{4}$ jobs left to complete. How many feet of copper wiring does she need?
- ✓ Joan worked overtime this week! Her overtime is a time-and-a-half ($1 \frac{1}{2}$) rate. Her normal pay rate is \$13. What is her overtime pay rate?
- ✓ Wyatt has $23 \frac{1}{4}$ tons of fertilizer available. This fertilizer is applied at a $\frac{1}{2}$ to the acre rate. How many acres can be covered?

Unit 5 Working with Decimals

Pam is a payroll clerk. She must calculate the total Social Security deductions using the information below for each employee.

	Arnold	Brian
Medicare	\$ 4.50	\$ 1.25
Retirement	126.33	99.32
TOTAL Social Security	<hr/>	

Pam must now deduct the total deductions from gross pay to determine the amount of each payroll check.

	Carla	Dennis	Earl
Gross Pay	\$ 23 4.50	\$ 571.25	\$ 1,212.33
Total deductions	129.45	89.12	568.77
Paycheck amount	<hr/>		

Jack is making a series of one-year loans. Calculate the total interest on these loans below based on interest rate and principle.

	Loan 1	Loan 2	Loan 3
Principle	\$ 5000.00	\$ 6 571.25	\$ 10,278.33
Interest rate	.14	.12	.07
Total Interest	<hr/>		

Paul is determining the selling price of his products. One of the costs is nails; determine the costs per unit from the information below:

$$\$4.50 \div 20$$

$$\$128.95 \div 125$$

- ✓ Devon has profits of \$592.33 that he plans to share with his employees. There are 15 employees. How much does each employee receive?
- ✓ Jillian is paid \$23.50 per hour and received 1.5 times that rate for overtime. She worked 3.5 hours of overtime. How much is her overtime pay?
- ✓ The delivery van for Ajans Electronics went 340.40 miles on 17.5 gallons of gas. What is the gas mileage of the van?
- ✓ A load of sand costs \$21.60 per ton. The construction job required 55.75 tons. What is the cost?
- ✓ The total overhead costs for the manufacturing jobs in January was \$45,221.22. There were 217.25 jobs completed in January. What is the cost per job?

Unit 10 Measurements, Ratios, and Proportions

Bill is the accounting clerk for a supply company. The cost of a number of products is based on one measurement and sold based on a different measurement. What are amounts below:

Cost measurement	3 gal	157 cm	1600 g	2 T	7 ft
Sales measurement	pt	m	kg	Lb	In

Cost measurement	29 gal	357 cm	4512 g	17.5 T	18.75 ft
Sales measurement	pt	m	kg	Lb	In

- ✓ Bernice sells 100 feet of rope for \$33.24. How much will she receive if she sells another 150 feet?
- ✓ Raw materials for a manufacturing job cost \$42,322 and will produce 120 units. What will be the raw material costs for 200 units?
- ✓ Jasmine is considering how many employees to send out on a job. She knows the 8 employees can get the job done in three hours, however, the owner wants the job done in two hours. How many employees should she send out?
- ✓ Jim is considering adding two employees. Currently, his payrolls cost is \$217,321 for 7 employees. How much will his payroll increase if he adds two?
- ✓ In a week, Brittni sells 18 dryers for a total of \$3,341.70. Her goal for commission is \$4000; how many dryers would she have to sell to reach commission?

Unit 6 Percents

Mike has a series of markup amounts for the merchandise he sells. Convert each markup percent below:

Percent	6%	78%	5.4%	117.45%
Decimal				
Fraction				

Jillian has started a new job at a merchandising store and there are several markup amounts that she has been given. To make calculations easier, she wants to convert them all to percents, decimals, and fractions.

Percent				
Decimal		.03		1.23
Fraction	$\frac{1}{2}$		$\frac{7}{16}$	

- ✓ An inventory had been completed at Miller's Textile and reveals that .02% of the \$523,993 amount of raw materials cannot be found. How much is the missing inventory worth?
- ✓ The selling price at Danke Rabah is 23% over the cost of each item. One item costs \$442.33; what is the selling price?
- ✓ A television that lists for \$2500 has been reduced by 15%. What is the selling price now?
- ✓ Sam is taking out a \$128,332 loan for a house which requires a 3% down payment. He has \$3,850 available; will he be able to get the loan?
- ✓ Yolanda has \$5,000 available for a down payment on a house. The down payment required is 4.5% of the loan; how much of a loan will Yolanda be able to receive?
- ✓ Richard receives a commission on all the sales he makes over \$4500 and his commission rate is 2.5%. This week, he made \$5467.76 in sales – what is his commission?
- ✓ A shipment of \$25,932 to our store has a number of items that must be returned. If \$592.33 of the shipment is returned, what percent of the shipment are we keeping?

Unit 9 Geometry

Beeton's Development, Inc. is searching for a plot of land for a development project. Calculate each parcel of land below to determine the total square feet.

Length	120'	150'	85.5'
Width	80'	110'	90.35'
Square feet			

Adler Tanks builds cylinder-shaped tanks for propane gas companies. Calculate the volume of each tank below:

Diameter	6'	5'	12'
Height	6'	6'	8'

Bernard has a lawn service company and charges his customers \$2.00 per square yard. Calculate his fee for each of the following yards:

	Triangle	Triangle	Rectangle	Rectangle	Parallelogram	Parallelogram
Length			125'	53.5'		
Width			230'	300'		
Base	20'	120.5'			35'	110.34'
Height	55'	88.25'			50'	321.55'
Square Feet						
Total Fee						

- ✓ Mullen, Inc. constructs and sells irrigations systems for farmers. In a particular field, the length of the irrigation system beginning at the center of the circle is 225 feet and it runs in a complete circle. What is the size of the watered area?
- ✓ Alan is establishing the costs of painting the office. One can of paint cover 56 square meters. The lobby of the office is circular and has a diameter of 32 feet. How many gallons of paint are needed?
- ✓ Fencing costs \$13.25 per foot. The office lot is circular and has a diameter of 413.25 feet. How much will the fence cost?