

Business and law

Accounting and Business Math Made Easy

One of the most dreaded and toughest courses in school is accounting. Accounting ranks up there with chemistry and physics. Fact is, if you can get your thought processes started off right, accounting becomes not only easy, it becomes completely logical. Once you see the light you'll wonder why anyone would find accounting difficult. This tutorial is going to start you from the very beginning. So let's get started

CASH

Cash is where accounting begins and ends. You *debit* cash when you receive it and you *credit* cash when you spend it. All other accounting entries depend on their relationship to cash. Allow me give you an example.

Joey has just started a yo-yo company with \$2000 dollars. His accounting entry will be \$2000 in the debit column (left side) of his cash account. One rule of accounting states that for every debit there must be a credit (right column) and vice versa, therefore, if Joey borrowed the money to get started, he will have to credit **accounts payable**. If he had the money, perhaps from savings, he would **credit owner's equity**. **Nevertheless, he must credit something**. For the purpose of our discussion we will say he borrowed the money, therefore he will credit accounts payable.

Assets are items you *own*.

Liabilities are items you *owe*.

Owner's equity (net worth) = assets minus liabilities

At this point, if Joey were to prepare a **balance sheet** (a statement listing assets, liabilities, and owner's equity) he would show zero equity, because his total **assets** are \$2000 *cash*, and his total **liabilities** are \$2000 *accounts payable*. **Assets minus liabilities equal owner's equity**. The only way his equity will change is if he does some business. If he does things right he will make a **profit** which increases owner's equity, if not, he will suffer a loss which decreases owners equity. Owner's equity can be either a plus or minus figure.

**Remember, when you receive cash you debit the cash account and always credit the item or account you received cash for. When you spend cash you credit the cash account and debit the item or account you paid.*

How does Joey keep up with his **daily** sales and expenses?

Answer: In a **journal**.

Joey has two journals: a cash receipts journal and a cash disbursement journal. A journal is a book with a bunch of columns for listing accounts. For example, when he pays the light bill he uses the cash disbursement journal. He will enter the amount paid in the credit side under the cash column and the debit side under the utility column.

Joey rents a building, purchases fire insurance, installs a telephone, buys an ad in a trade magazine, gets the lights turned on, and hires a secretary/bookkeeper. All of these **expenses** are necessary to run his business. Because these expenses are **necessary whether or not he does any business** they are called **overhead expenses**.

Expenses are all costs associated with doing business. If the expense increases or decreases directly with sales then it is a **direct or variable expense**. If the expense remains constant regardless of sales volume then it is a **fixed or overhead** expense.

How does Joey make his accounting entries for these initial expenses? Up until now he has only two accounts, cash and accounts payable. Now he has incurred new expenses, each of which will require a separate account. Let's see how they will be set up.

Rent - The rent is \$150 per month with a \$150 security deposit. This transaction requires two accounts: (1) rent expense and (2) security deposit. When Joey pays the total \$300 he will credit cash (he's taking money out of the cash account) and debit rent expense for \$150 and security deposit for \$150. Why two separate accounts? Because rent is an expense. But the security deposit is an asset; it is your money, it's just been moved into the landlords account.

Insurance - Joey's insurance cost is \$360 per year and he must pay for it up front. He will again credit his cash account for \$360 because he had to write the check. Again, he must set up two insurance accounts to debit. One account is called insurance expense and the other is called prepaid insurance. What's the difference? When Joey first buys the insurance he does not use it all at one time, he uses it at the rate of \$30 per month. Therefore, his initial entry would be a \$360 debit to prepaid insurance, which is an asset account. Insurance expense will remain at \$0. At the end of the month he will credit prepaid insurance for \$30 and debit insurance expense for \$30.

As an example; after four months, his total insurance expense will be \$120 and his prepaid insurance (asset) will be reduced to a balance of \$240.

Some smaller items such as stamps and stationary, although technically can be prepaid assets, are considered expenses and do not require prepaid accounts.

Lights and telephone - If Joey has to pay a deposit to have these items turned on, the deposit will be a credit to cash and a debit to security deposit. Remember, security deposit is an asset not an expense. At the end of the month when the first bills arrive, the transaction will be a credit to cash and a debit to lights and telephone expense respectively.

Advertising - The ad Joey bought costs \$480 and the ad agency is offering 30 day's credit. Since no cash has been exchanged yet, the entry will not affect the cash account; however, the advertising expense has been incurred. Therefore, advertising expense must be debited and as stated earlier, for every debit there must be a credit. So what will we credit?

Accounts payable (a liability) is the answer. At the end of the month Joey will pay the ad bill and cash will be credited and accounts payable will be debited, leaving a zero balance. Advertising expense will be left untouched with a \$480 debit balance

Secretary/bookkeeper - This person is an administrative expense, also part of the company overhead. If the secretary is paid \$400, cash is credited for \$400 and office salaries are debited for \$400.

As you may see by now, anytime cash is spent it is credited and whatever the cash is paying for is debited. The debited account can be either an expense or an asset.

Let's see what happens when Joey starts doing some business. Joey receives his first order from Acme Toys for \$200 worth of yo-yos. Did he receive cash? No, it's just an order. The only thing he can do with an order is make a note that it needs to be filled, but there is no accounting entry. Joey does, however, need to buy some wood, strings, glue, and a lathe to produce the yo-yos. The bank finances a lathe for \$10,000 at \$300 per month, he charges \$75 worth of wood and glue, and pays \$10 cash for string.

What do his entries look like?

The day the lathe is delivered he creates an asset account called lathe and debits it for \$10,000. Since he has not yet made any payments to the bank, he will credit the notes payable account (this is an account payable over time) for \$10,000. At the end of the month he will make a payment, which must be split between interest and principal. Let's say the first payment of \$300 contained \$75 interest. Therefore, his entry will be \$300 credit to cash, \$75 debit to interest expense and \$225 debit to notes payable.

The lathe is an asset. Because it is a relatively expensive item with a relatively long service life it is **capitalized**, which means it may be depreciated over its useful life. Smaller, less expensive tools may be treated as expenses.

The \$75 he charged for wood and glue will be entered as a debit to the materials account and a credit to accounts payable and the \$10 for string will be a debit to the materials account and a credit to cash. Remember, he charged the wood but paid cash for the string.

Generally, money kept in a drawer, **petty cash**, will have its own account. Joey could have cashed a check at the bank and used it for petty cash. Therefore, the entry would be credit cash and debit a new account called *petty cash*. The string would then be paid out of petty cash; credit petty cash and debit materials.

A few days later Joey has produced the order and shipped them out to Acme Toys. The secretary makes out an **invoice** (bill) and sends it to Acme. The bookkeeper enters a \$200 debit in the accounts receivable account and credits the sales account (**revenue**). When Acme pays the bill, Joey's bookkeeper will debit cash and credit accounts receivables. The sales account will remain untouched as a sale is a sale, and a sale is made whether it is paid for or not. Below are sample journal entries of Joey's business.

To keep up with day-to-day transactions, Sally has made the following entries in the **journal**.

GENERAL JOURNAL

Date	Description	Debit	Credit
2/5/2007	cash	2000	
	accounts payable (loan from uncle Bob)		2000
2/7/2007	cash		150
	rent expense	150	
2/10/2007	cash		360
	prepaid insurance	360	
2/10/2007	cash		50
	utility deposit	50	
2/10/2007	cash		100
	telephone deposit	100	
12/12/2007	account payable		480
	advertising expense	480	
12/12/2007	cash		400
	salaries	400	
12/20/2007	cash	10,000	
	notes payable (loan from ABC bank)		10,000
12/20/2007	cash		10,000
	equipment (lathe)	10,000	
2/24/2007	Accounts receivable (Acme Toys)	200	
	sales		200
3/1/2007	cash		100
	account payable (uncle Bob)	90	
	interest expense	10	
3/1/2007	cash		300
	notes payable (ABC Bank)	225	
	interest expense	75	
3/10/2007	cash	200	
	accounts receivable (Acme Toys)		200

After a few months in business Joey is beginning to realize that he can't keep up with who owes him and whom he owes. The bookkeeper suggests he start keeping ledgers. **Ledgers** are books that contain a page (ledger sheet) for each individual creditor (**accounts payable ledger**) and each individual customer (**accounts receivable ledger**). At the end of each day or as with some businesses, each week or month, the bookkeeper will transfer the information in the journal to a ledger. **Accounts receivable** is an account with a running total of **all** money owed to Joey. It does not contain individual customer balances. The **accounts receivable ledger** shows the amount owed by each customer. Likewise, **accounts payable** is an account showing **all** the money Joey owes. The **accounts payable ledger** shows balances of each creditor.

Now that I've attempted to help you understand the basic principles of accounting, you may still be saying "Huh! What did he say?"

If you noticed, the decision of whether an item should be debited or credited is determined by whether Joey (1) has received cash, (2) will receive cash, (3) has paid cash, or (4) will pay cash.

When cash is received - debit cash, credit sales (revenue):

When you will receive cash - Debit accounts receivable, credit sales (revenue). When a customer pays on his account - debit cash, credit accounts receivable

When you pay cash - Credit cash, debit the appropriate expense or asset account

When you (charge) or will pay cash later - Credit accounts payable, debit the appropriate expense or asset account.

Once you have paid cash (on charge acct) - Credit cash, debit accounts payable.

Where I live we have a lot of crabbers. A typical one-man crab company would have a balance sheet that looks like this (keep in mind a great big, multi-million dollar corporation will have a balance sheet and accounting system based on the same principals, only the dollars and the number of accounts will be greater).

JACKS CRAB OPERATION

BALANCE SHEET

December 31, 2007

Assets

Current assets

Cash	\$580
Inventory (crabs)	95

Accounts receivable	230	
Total current assets		905
Other assets		
Prepaid insurance	180	
230 crab pots	5,750	
24 foot Carolina skiff	39,280	
Depreciation	(8750)	
8 months prepaid slip rent	<u>1120</u>	
Total assets		\$38,485
Liabilities and owner's equity		
Current liabilities		
Accounts payable	\$125	
Total current liabilities		125
Other liabilities		
Note on boat	21,200	
Note on crab pots	<u>1480</u>	
Total liabilities		\$22,805
Owner's equity (total assets-total liabilities)		\$15,680
Total liabilities and owner's equity		\$38,485

A balance sheet tells how much you own (**assets**), how much you owe (**liabilities**), and how much you're worth (**owner's equity**). When borrowing money, the lender is most interested in your current asset to current liability ratio. According to Jack's balance sheet, his ratio is 7.24:1, which is very good (\$905/\$125). If this ratio ever becomes less than 1:1 it might be time to bail out, as Jack will not be able to meet his current obligations.

The income statement would look like the following:

JACKS CRAB OPERATION			
INCOME STATEMENT			
Dec. 31, 2007			
Sales		\$32,300	100%
Direct costs	\$2250		
Fuel and oil	900		
Bait	480		
Misc. supplies	<u>3630</u>		
Cost of goods sold		\$7260	22.5%
Overhead			

Slip rent	700		
Depreciation	8900		
Insurance	320		
Licenses	125		
Repairs	1670		
Interest	<u>1920</u>		
Total overhead		\$13,635	42.2%
Total costs and overhead	20,895		64.7%
Income from operations	11,405		35.3%
Other income			
Gain on sale of boat	5200		
Income before taxes	16,605		51.4%
Income taxes	<u>4360</u>		
Net income	\$12,245		37.9%

Notice the percentages to the right. Each one represents a percentage of total sales (revenue). For example, overhead equals 42.2% of sales ($\$13,635/\$32,300$). When we talk about percentages in business they are generally expressed as percent of sales. When a business person says his gross profit is 28%, he means 28% of total sales. Therefore, if his total sales were $\$150,000$, then his gross profit would be $\$42,000$ ($\$150,000 \times .28$).

Using data taken from the balance sheet and income statement, a number of other financial ratios can be determined. Two important ratios are:

Debt-to-Equity

= Total liabilities/owner's equity

= $\$22,805/\$15,680$

= 1.45 (this means Jack owes 1.45 times more than he is worth)

Return-on-Investment

= Net income/assets

= $\$12,245/\$38,485$

= .32 or 32% (this tells Jack he is making the equivalent to 32% interest on his investment)

How to price a job and stay in business

This is perhaps the most important section of this section. If you do not make a profit you do not stay in business. Before we talk about profit, let's talk about pricing. The price of a product is dictated, in a capitalistic world, by supply and demand. When supply is high and demand is low the price is low and when the supply is low and demand is high, the price is high. If you're fortunate enough to offer a product with low supply and high demand, you may charge whatever the market will bare. If, however, your product falls into the mature product category where demand is high or good and supply is high or good, then your price may very well be dictated not by you but by the going market price. Unfortunately, in a mature market there are competitors whom will offer their goods at prices below their costs in order to increase sales. Eventually their business fails, but not before establishing a new low benchmark for your products price.

Industries dominated by small businesses are the most susceptible failure due to soft prices because most small business owners do not understand or will not accept the fact that there is a break-even point in pricing and when that point is reached it's time to reevaluate your business strategy. Large companies, Proctor and Gamble for example, are vying for market share just like the little guys. The difference is they have an army of cost accountants that are constantly keeping an eye on the break-even point. If they get too close to the break-even point with price they will use another marketing gimmick to gain share such as change packaging or make it new and improved, but they will not lower the price below break-even. P&G's competitors are just as business savvy; they also know that products cannot be sold below cost and still stay in business. Therefore, the large companies rarely are put out of business because of price wars.

So, how do you price a job or product in a competitive market?

Know your product cost

In Joey's yo-yo business, let's say he has \$1.00 in labor and material per yo-yo.

Know your overhead %

Joey's income statement from last year showed 15% overhead.

Know what % profit will make you happy

For our example, Joey feels like 12% is the minimum profit he will accept.

The calculation

Question: What does the sales price have to be to cover Joey's overhead and profit?

Solution:

- 1) He knows the material and labor cost per yo-yo is \$1.00.
- 2) Joey's overhead + profit = 27%. (15% + 12%)
- 3) Therefore, he must mark-up his yo-yo 27% in order to cover overhead and profit.

Most readers (99%) would say, "Well, this is simple, just multiply \$1.00 x .27 then add the answer to \$1.00 or simply multiply \$1.00 x 127%. Either way, the sales price will be \$1.27". **WRONG!** Don't believe me? OK, give me a 25% discount. After all, you're still making 2%. Try it and see what happens. If your math is correct you will be selling the yo-yo for about \$.95, which means you're going to lose about a nickel instead of making 2 cents. Why? Because the sale price was figured as a percentage of *cost* (\$1.00), not *sales*.

Remember, all financial percentages used in business are percentages of sales not cost.

The correct method

The following is the correct method for figuring a sales price. We are not going to go into the where and why, just remember this for the exam.

Always start off with 100%

Deduct the percent you need to cover overhead and profit (27%) This leaves 73% (100% - 27% = 73%)

Divide the cost (\$1.00) by 73%

$1.00/.73 = \mathbf{\$1.37 \text{ sales price}}$

Joey will sell his yo-yos for \$1.37 each. If the market will not bear this price then he needs to find something else to do for a living, unless he swallows his pride and takes a smaller percentage of profit.

The above formula should be used to figure all jobs. For example, if you pay \$1750 for a heat pump, \$850 for ductwork, \$1200 labor, and \$50 for a permit. Your overhead is 20% and you wish to make 25% profit. What price would you sell the job for?

$20\% + 25\% = 45\%$ (percentage needed to cover overhead and profit)

$100\% - 45\% = 55\%$ or .55

Total cost of job = \$3850

Sales price = $\$3850/.55$

Sales price = **\$7000**

Let's have some more fun with numbers and percentages now that you're getting the hang of it.

Question: What would your annual sales have to be if you are selling a product with a 15% profit and you need to make \$75,000?

Solution:

\$75,000

.15

= \$500,000

Question: Suppose you raise your price 5% and now make 20% profit?

Solution:

$$\begin{array}{r} \underline{\$75,000} \\ .20 \\ = \$375,000 \end{array}$$

Moral of the story: Raise your price a little bit and do a whole lot less work. Lower your price a little bit and do a whole lot more work.

Payroll

Below are some examples and explanations of payroll calculations. For this discussion I will use Willie as my payroll guinea pig.

Willie earns \$12.00 per hour, is married, claims 3 withholding allowances, and is paid weekly. I will use a 2003 Circular E (federal income tax tables). Other years' work the same way, only the numbers have changed.

Before doing the math, we must understand the federal government's Fair Labor Standards Act. This act mandates a minimum wage and dictates when overtime must be paid.

Basically, overtime must be paid at a rate of 1 1/2 times the regular hourly wage if the employee works over 40 hours in any one week. Willie's overtime rate will be \$18.00/hour ($12.00 \times 1.5 = 18.00$).

If Willie works 40 hours, his pay will be \$480 ($\$12 \times 40 = \480).

If Willie works 48 hours, his pay will be \$624 ($\12×40 plus $\$18 \times 8 = \624).

If Willie puts in 40 hours during Thanksgiving week and works on Thanksgiving Day, a paid holiday, he will be paid for 48 hours, but only straight time, \$576 ($\$12 \times 48 = \576).

An employee must *physically* work over 40 hours per week to get overtime pay. If Willie works a 12-hour day he will only be paid straight time. The law has no restriction on the number of hours worked per day, just per week. **A week is 168 consecutive hours.**

If Willie takes a day off this week to go fishing (works 32 hours) and makes his time up next week (works 48 hours), he must be paid 8 hours overtime. The law says an employee cannot work more than 40 per week, period, without paying overtime.

MARRIED Persons—WEEKLY Payroll Period
 (For Wages Paid in 2003)

If the wages are—		And the number of withholding allowances claimed is—										
At least	But less than	0	1	2	3	4	5	6	7	8	9	10
		The amount of income tax to be withheld is—										
50	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
130	135	1	0	0	0	0	0	0	0	0	0	0
135	140	1	0	0	0	0	0	0	0	0	0	0
140	145	2	0	0	0	0	0	0	0	0	0	0
145	150	2	0	0	0	0	0	0	0	0	0	0
150	155	3	0	0	0	0	0	0	0	0	0	0
155	160	3	0	0	0	0	0	0	0	0	0	0
160	165	4	0	0	0	0	0	0	0	0	0	0
165	170	4	0	0	0	0	0	0	0	0	0	0
170	175	5	0	0	0	0	0	0	0	0	0	0
175	180	5	0	0	0	0	0	0	0	0	0	0
180	185	6	0	0	0	0	0	0	0	0	0	0
185	190	6	0	0	0	0	0	0	0	0	0	0
190	195	7	1	0	0	0	0	0	0	0	0	0
195	200	7	1	0	0	0	0	0	0	0	0	0
200	210	8	2	0	0	0	0	0	0	0	0	0
210	220	9	3	0	0	0	0	0	0	0	0	0
220	230	10	4	0	0	0	0	0	0	0	0	0
230	240	11	5	0	0	0	0	0	0	0	0	0
240	250	12	6	0	0	0	0	0	0	0	0	0
250	260	13	7	1	0	0	0	0	0	0	0	0
260	270	14	8	2	0	0	0	0	0	0	0	0
270	280	15	9	3	0	0	0	0	0	0	0	0
280	290	16	10	4	0	0	0	0	0	0	0	0
290	300	17	11	5	0	0	0	0	0	0	0	0
300	310	18	12	6	1	0	0	0	0	0	0	0
310	320	19	13	7	2	0	0	0	0	0	0	0
320	330	20	14	8	3	0	0	0	0	0	0	0
330	340	21	15	9	4	0	0	0	0	0	0	0
340	350	22	16	10	5	0	0	0	0	0	0	0
350	360	23	17	11	6	0	0	0	0	0	0	0
360	370	25	18	12	7	1	0	0	0	0	0	0
370	380	26	19	13	8	2	0	0	0	0	0	0
380	390	28	20	14	9	3	0	0	0	0	0	0
390	400	29	21	15	10	4	0	0	0	0	0	0
400	410	31	22	16	11	5	0	0	0	0	0	0
410	420	32	23	17	12	6	0	0	0	0	0	0
420	430	34	25	18	13	7	1	0	0	0	0	0
430	440	35	26	19	14	8	2	0	0	0	0	0
440	450	37	28	20	15	9	3	0	0	0	0	0
450	460	38	29	21	16	10	4	0	0	0	0	0
460	470	40	31	22	17	11	5	0	0	0	0	0
470	480	41	32	24	18	12	6	0	0	0	0	0
480	490	43	34	25	19	13	7	1	0	0	0	0
490	500	44	35	27	20	14	8	2	0	0	0	0
500	510	46	37	28	21	15	9	3	0	0	0	0
510	520	47	38	30	22	16	10	4	0	0	0	0
520	530	49	40	31	23	17	11	5	0	0	0	0
530	540	50	41	33	24	18	12	6	0	0	0	0
540	550	51	42	34	25	19	13	7	1	0	0	0

Circular E (for current publication go to <http://www.irs.gov/pub/irs-pdf/p15.pdf>)

Three federal deductions are taken out of Willie's check: income tax, social security, and Medicare. Income tax is computed using the above schedule in Circular E. Social security is calculated as 6.2% of income. Once Willie earns \$118,500 for the year, he will no longer have to pay social security (2015 figures). Medicare is calculated as 1.45% of his income with no income limit. In addition to federal taxes, state income taxes are also deducted (check with your state for tax rate).

Example:

Willie works 42 hours for the week. The state income tax rate is 7%. What is his take home pay?

40 hours regular time x \$12.00	= \$480
2 hours overtime x \$18.00	<u>= \$ 36</u>
Total pay	= \$516

Federal income tax – Using the circular E schedule above, locate the column at the top labeled 3 allowances, go down the column until you reach the row 5 10-520 and you will see **\$22** as the tax amount of tax to withhold.

Social security – Obviously, Willie has not made \$94,200 this year, therefore his social security will be 6.2% of \$516.

(Social security)	.062 x \$516 =	\$31.99
(Medicare)	.0145 x \$516 =	7.48
(Federal tax)	see circular E	22.00
(State tax)	.07 x \$516 =	36.12

All four withholdings add up to \$97.59, which is deducted from his check.

Weekly pay	\$516.00
Total withholdings	<u>-97.59</u>

Take home pay \$418.41

There are certain taxes related to the employee's income that **the employer must pay**. These include the following:

Social security – The social security rate is actually 12.4%. The **employee pays half** and the employer pays half (6.2% each).

Medicare – The Medicare rate is actually 2.9%. The employee pays half and the **employer pays half** (1.45% each).

Federal unemployment tax (FUTA) - .8% of the first \$7000 of employee's salary. This is paid once a year by the employer and may not be deducted from the employee's pay. If FUTA is not paid on time then the rate is 6.2%

State unemployment tax – This varies state-by-state and must be paid by the employer and may not be deducted from the employee’s salary.

Where and when does the employer deposit the funds withheld from employees?

FICA funds (social security and Medicare) and federal income taxes withheld must be deposited in a **federal depository bank or Electronic Federal Tax Payment system (EFTPS)**. Most major banks are federal depository banks. The frequency at which the funds must be deposited is based on the total amounts withheld from all employees. Circular E gives instructions on when deposits must be made.

Unemployment taxes are sent to their respective agency.

Untimely payments are subject to penalties; some may be substantial. These penalties are outlined in Circular E.

A **payroll journal** should be maintained to account for the total withholding moneys and a **payroll ledger** should be maintained to keep a record of each employee’s wages and withholdings.

Calculating depreciation expense

Most expenses are cut and dry. If you spend \$160 on utilities, the expense is \$160. Depreciation, on the other hand, must be calculated. Two common methods used to calculate depreciation are the **straight line** and the **accelerated depreciation** method. To illustrate each method we will depreciate a backhoe purchased in July for \$19,500.

Under the **straight line method**, \$5000 will be estimated to be the **salvage value** (what you think you can sell it for at the end of five years); therefore, \$14,500 is to be depreciated evenly throughout a five-year period. In each of the five years you can deduct \$2900. Since you purchased the backhoe in July and your *fiscal year* ends in December, you are only entitled to six months depreciation the first year, which is 1/2 year or \$1450. The fifth year of ownership will fall on July so you will also get 1/2 of that year’s depreciation (\$1450).

IRS rules allow for methods of **accelerated depreciation**, which allows a business to claim a higher amount of depreciation for assets in the first years of operation. One such method is the *double declining balance method*. For example; the backhoe above has a life of five years, therefore each year 1/5 or 20% may be depreciated. The double declining balance method allows the business to take 40% (double the 20% allowed under the straight line method above) of the asset balance as depreciation expense each year until its useful life comes to an end.

	Depreciation	Book Value
Year 1	$.40 \times \$19500 = \7800	balance = \$11700

Year 2 $.40 \times \$11700 = \4680 balance = \$7020
Year 3 $.40 \times \$7020 = \2808 balance = \$4212
Etc.....

What happens if the backhoe is sold after six years for \$3500? If, you used the straight line method you will have to show \$1500 as a *loss on sale of assets* under other income/expenses on your income statement because the books are showing it is worth \$5000. If, however, you use the accelerated depreciation method, resulting in a value of \$0 in five years then \$3500 would show up as a *gain in sale of assets* because the books are showing it to be worth \$0.

NASCLA Contractor business practice exam

Note: This practice exam does not cover state specific laws, such as Worker's Compensation and lien laws. Generally, these laws and regulations can be downloaded free with an internet search

1. If any party fails to do anything agreed upon in a contract, then the contract is considered _____
 - a) null and void
 - b) breached
 - c) stepped on
 - d) amended
2. A bidding contractor may get detailed and precise descriptions of the components of a construction project by consulting the _____
 - a) drawings
 - b) contract
 - c) general conditions
 - d) specifications
3. Using the information supplied, what is the company's liquidity ratio
 - a) .432
 - b) 1.74
 - c) .06
 - d) 2.31
4. First tier contractors may file claims against a bond if they are not paid within _____ days after providing the last of their labor or material
 - a) 60
 - b) 90
 - c) 120
 - d) 180

5. An advantage to owning your own business is _____
- a) Assured paycheck
 - b) Having full control of your work schedule
 - c) Making payroll is no problem
 - d) Working hours are always the same
6. Workers compensation insurance does not cover
- a) medical expense
 - b) partial wages
 - c) rehabilitation
 - d) loss of property use
7. Most comprehensive general liability policies will cover contractor warranties and defects in workmanship
- a) true
 - b) false
8. The minimum age for employment in hazardous locations is _____
- a) 14
 - b) 16
 - c) 18
 - d) 21
9. Which of the following is not required to obtain a federal employer identification number (EIN). _____
- a) sole proprietorship with 2 or more employees
 - b) corporation with three stockholders
 - c) sole proprietorship with no employees
 - d) S corporation with 5 or more employees
10. A company with 50 employs, accused of a willful violation and fined \$50,000, may have the penalty adjusted down to _____
- a) \$20,000
 - b) \$40,000
 - c) \$50,000
 - d) may not qualify for an adjustment
11. Acme Plumbing has yearly revenue (sales) of \$675,000. Its overhead rate is running 22%. What is the new overhead rate if next years sales increase by \$55,000 and overhead increases by \$14,000?
- a) 20.3
 - b) 22.3
 - c) 21.9
 - d) 24.0
12. An employer is responsible for paying _____ of the FUTA on an employee's

wages.

- a) all
- b) 1/2
- c) none
- d) 1/3

13. Amounts paid to independent contractors over \$600 Must be reported to the IRS on _____

- a) Form W-2
- b) Form W-4
- c) Form 1099
- d) Form SS-8

14. The civil penalty for failure to follow the federal lead based paint regulations is a fine up to _____.

- a) \$7000 per day
- b) \$25,000 per day
- c) \$10,000 per day
- d) \$1000 per day

15. Which act allows an employee, that quits his/her job, to continue to keep the companies health insurance coverage for up to 18 months at the employee's expense

- a) COBRA
- b) Davis-Bacon
- c) Walsh-Healy
- d) Service Contract

16. Time card records must be kept for at least _____ years.

- a) 4
- b) 3
- c) 7
- d) 5

17. Acme Plumbing has yearly sales of \$367,000, Its overhead expense is \$62,000. What is the percentage of overhead to sales?

- a) 5.9%
- b) 59%
- c) .16%
- d) 16.9%

ABC Company

net income \$42,000
liabilities \$278,000
revenue \$890,000
owner's equity \$548,000

18. Using the information supplied what is the company's profitability ratio
- a) 5.7%
 - b) 9.83%
 - c) 4.71%
 - d) 8.29%
19. One consideration when renting equipment is _____
- a) replacement cost
 - b) taxes
 - c) hourly rate
 - d) maintenance
20. When applying for a bond, the surety company general will not be interested in which of the following items
- a) contractor's financials
 - b) contractor's performance record
 - c) contractor's capacity to complete the work
 - d) contractor's corporate charter
21. The Lead Pre-Renovation Education Rule requires the pamphlet, "Protect your Family From Lead in Your Home" to be distributed to an adult occupant, if the home was built before 1978 and more than ____ sq. ft. of surface is to be disturbed
- a) 5
 - b) 10
 - c) 6
 - d) 2
22. When respirators are required on lead laden jobsites, they must be
- a) tested at least annually
 - b) paid for and supplied by the employer
 - c) assured proper fitting by the employee
 - d) all of the above
23. Worker's compensation insurance provides _____.
- a) income payments to injured employees
 - b) medical bill payments for injured employees
 - c) none of the above
 - d) both of the above
24. The Clean Water act regulates the discharge of pollutants into _____
- a) ditches
 - b) navigable waters
 - c) ponds
 - d) all the above
25. An example of a long term liability would be a _____.

- a) mortgage
- b) debt on equipment that will be paid off this year
- c) account payable for inventory
- d) workers compensation insurance expense

26. Which of the following must include income taxes as an expense when computing net income.

- a) sole proprietorship
- b) partnership
- c) limited liability company
- d) corporation

27. Which of the following is not company overhead

- a) labor
- b) office salaries
- c) rent
- d) advertising

28. An OSHA violation that the employer knew or should have known to have a high probability that serious physical harm or death could occur is a _____ violation

- a) serious
- b) willful
- c) repeated
- d) other than serious

29. Which act establishes minimum wages and overtime for work exceeding 40 hours per week

- a) Davis Bacon
- b) COBRA
- c) Fair Labor Standards Act
- d) Employment Compensation Act

30. Water runoff from construction sites is typically _____ times greater than that from agricultural land.

- a) 2-3
- b) 10-20
- c) 5-8
- d) 1000-2000

31. The National Institute for Occupational Safety and Health must be notified in writing _____ before disposal of any records

- a) 30 days
- b) 60 days
- c) 3 months
- d) 6 months

32. The _____ Act requires that the prevailing wage rate and benefits for all federal government construction projects be consistent with federally established mandated rates for services and jobs being delivered under the project.

- a) COBRA
- b) Davis-Bacon
- c) Walsh-Healy
- d) Miller

33. A term used that requires the contractor to assume liability for injuries or other damages that occur on the owners property, but are not the fault of the owner is _____

- a) warranty
- b) guarantee
- c) indemnification
- d) responsibility

34. The Fair Labor Standards Act applies to all employers who have ____ or more employees

- a) 1
- b) 5
- c) 10
- d) 25

35. All incidents resulting in fatal heart attacks_____.

- a) must be reported to OSHA only if the company has 5 or more employees
- b) must be reported to OSHA only if the company has 10 or more employees
- c) must be reported to OSHA
- d) must be reported to OSHA if the employee lives

36. Which of the following is considered indirect cost

- a) office manager
- b) labor
- c) jobsite materials
- d) jobsite signage

37. "Products completed operations hazard insurance" covers _____

- a) products that are out of the company's hands
- b) products or work performed away from the company premises
- c) none of the above
- d) both of the above

38. Which of the following is the most accurate estimating method____

- a) conceptual
- b) square foot
- c) cubic foot
- d) take off

39. A business that does not survive the death of its owner is called a/an _____
- a) S corporation
 - b) Corporation
 - c) Sole proprietorship
 - d) partnership
40. The OSHA poster must be displayed only if the company has _____ employees
- a) 1 or more
 - b) 5 or more
 - c) 10 or more
 - d) 25 or more
41. The Americans with Disabilities Act applies to employers with _____ employees or more.
- a) 15
 - b) 1
 - c) 5
 - d) 25
42. Failure to abate an OSHA violation carries a maximum penalty of _____
- a) up to \$1000 per day
 - b) up to \$5000 per day
 - c) up to \$7000 per day
 - d) up to \$10,000 per day
43. Phase II of the Clean Water Act regulates runoff on _____ acre construction sites
- a) 10-20
 - b) 1-5
 - c) 2-10
 - d) 5 or more
44. If the parking brake fails on a company truck and damages a customers building, which policy provides coverage _____
- a) motor vehicle insurance
 - b) comprehensive general liability insurance
 - c) workers compensation insurance
 - d) property insurance
45. Once a/an _____ is made, a contract is formed and neither party can make any changes to the terms
- a) offer
 - b) bid
 - c) consideration
 - d) acceptance

46. An employee earns \$15.00 per hour. If he/she physically works 40 hours in one week plus gets 8 hours of vacation time. What will be the gross pay.

- a) \$780
- b) \$720
- c) \$1080
- d) \$480

47. When a contract includes an "allowance" and the work for the allowance is less than anticipated, _____

- a) the contractor must pass on the savings to the owner
- b) the contractor keeps the savings
- c) the contractor has materially breached the contract
- d) the contract is null and void

48. All incidents resulting in the hospitalization of _____ or more employees must be reported to OSHA

- a) 1
- b) 2
- c) 3
- d) 5

49. Which bond guarantees the work will be done according to plans and specs

- a) bid bond
- b) performance bond
- c) maintenance bond
- d) payment bond

50. The maximum time duration an employee may be subjected to 97 decibels without hearing protection is _____

- a) 8 hours
- b) 4 hours
- c) 3 hours
- d) 1/2 hour

51. A dump truck operator enters a contract to supply fill dirt for \$75 per load. This type of contract is a _____

- a) a lump sum contract
- b) cost plus contract
- c) unit price contract
- d) traditional contract

52. Which of the following is not considered an "Underground Storage Tank"

- a) a 100% buried oil tank
- b) oil tank with 25% buried underground
- c) oil tank on a basement floor
- d) oil tank with 75% buried underground

53. The Personal Responsibility and Work Opportunity Reconciliation Act

_____.

- a) helps keep track of employees with credit obligations
- b) helps employees with child support obligations obtain work
- c) retrains previously bankrupt employers
- d) Helps keep track of employees with child support obligations

54. The Age Discrimination In Employment Act applies to employers with _____ or more employees.

- a) 20
- b) 15
- c) 1
- d) 50

55. An employee without hearing protection must not be exposed to 125 decibels any longer than _____

- a) 15 minutes
- b) 20 minutes
- c) 30 minutes
- d) 45 minutes

56. Which of the following is illegal?

- a) bid rigging
- b) bid shopping
- c) bid chiseling
- d) all the above

57. A policy that covers a contractor for the loss of a building under construction by fire is called.

- a) builders risk
- b) contractor's liability
- c) work in progress
- d) property insurance

58. A company has total assets of \$125,000 and total liabilities of \$90,000, What is the owner's equity (net worth)

- a) \$215,000
- b) \$125,000
- c) \$90,000
- d) \$35,000

59. The minimum age for employment in non-hazardous locations is _____.

- a) 14
- b) 16
- c) 18
- d) 21

60. Companies with _____ or fewer employees do not need to maintain injury and illness records unless OSHA request them to do so in writing

- a) 5
- b) 10
- c) 15
- d) 20

61. A workweek is defined as a period of _____ hours during 7 consecutive 24 hour periods

- a) 240
- b) 168
- c) 40
- d) 32

62. Claimants wishing to bring suit against a Miller Act bond must do so within _____ after last providing labor or material

- a) 6 months
- b) 1 year
- c) 1-1/2 years
- d) 3 months

XYZ Company

assets \$258,000
liabilities \$210,000
account payable \$72,000
debt \$63,000

63. Using the information above, what is the company's debt to equity ratio

- a) 1.3
- b) 2.6
- c) 1.2
- d) 3.8

64. Working capital is calculated as

- a) assets minus liabilities
- b) revenue minus liabilities
- c) current asset minus current liabilities
- d) owner's equity minus taxes

65. Which of the following are not part of a three party bonding agreement

- a) contractor
- b) surety company
- c) customer
- d) supplier

66. A policy that protects a company from damages to property belonging to someone other than that of the company is called

- a) property insurance
- b) comprehensive general liability insurance
- c) builders risk insurance
- d) motor vehicle insurance

67. A fatality that occurs within 30 days of an accident must be reported to OSHA with _____ of the death

- a) 30 days
- b) 24 hours
- c) 72 hours
- d) 8 hours

68. Injury and Illness Incident reports are recorded on Form _____

- a) 300
- b) 301
- c) 300A
- d) 301A

69. A type of business that is taxed on its earnings and then taxed again when the shareholder report their earnings, is called a/an_____

- a) partnership
- b) S corporation
- c) Corporation
- d) Limited liability company

70. If a Lead PRE pamphlet is mailed, it must be by certified mail _____ days prior to starting work.

- a) 5
- b) 10
- c) 7
- d) 14

71. The Wage Garnishment Law limits the amount that can be taken under a garnishment for _____

- a) child support
- b) state taxes
- c) neither of the above
- d) either of the above

72. What is the federal minimum wage as of 4-1-15.

- a) \$5.15
- b) \$6.75
- c) \$7.50
- d) \$7.25

73. Employers must retain OSHA records for _____ years
- a) 3
 - b) 6
 - c) 5
 - d) 7
74. MSDS sheets do not need to include which of the following data _____
- a) date of preparation or last editing of data
 - b) fire and explosive data
 - c) medical rehabilitation procedure
 - d) health hazard data
75. Which of the following is not project overhead _____
- a) supervisor salary
 - b) permits
 - c) advertising
 - d) bonds
76. Sally's regular pay is \$12.00 per hour. This week she worked 44 hours plus received a \$25 extra for working the night shift. What is gross pay for the week?
- a) \$577
 - b) \$505
 - c) \$528
 - d) \$562
77. Disclosing one subcontractors bid to another is called _____
- a) bid rigging
 - b) bid bargaining
 - c) bid shopping
 - d) bid sharing
78. An accounting system using a/an _____ basis gives a better picture of the company's performance than a cash basis system.
- a) lifo
 - b) accrual
 - c) on-time
 - d) fico
79. The owner of XYZ Company wishes to make \$125,000 this year. what would his sales have to be if the company worked on a 30% profit?
- a) \$178,571
 - b) \$375,000
 - c) \$416.666
 - d) \$433.333
80. One of the two basic laws of estimating is, high estimates result in _____
- a) increased volume

- b) decreased volume
- c) lower profits
- d) lower sales price

81. Form W-2 must be distributed to employees no later than _____

- a) January 15th
- b) January 31st
- c) February 15th
- d) February 28th

82. For accounting, a good example of a source document is a/an _____

- a) journal
- b) invoice
- c) ledger
- d) income statement

83. Most motor vehicle insurance will cover towed equipment such as cement mixers

- a) true
- b) false

84. Who purchases and owns a "key man policy"

- a) the key man
- b) the key man's heirs
- c) the company
- d) any company officer

85. A willful violation of OSHA regulations carries a fine of _____

- a) \$100 - \$7000
- b) up to \$4000
- c) \$5,000 - \$70,000
- d) \$250,000 - \$500,000

86. OSHA standards for the removal or handling of asbestos must be followed if the material contains more than _____ asbestos

- a) .5%
- b) 1%
- c) 5%
- d) 8%

87. An example of a current asset would be _____.

- a) inventory
- b) trucks
- c) building
- d) mortgage

88. To qualify as an "Underground Storage Tank", the volume of the tank and

pipes must be _____ % or more below the surface.

- a) 10
- b) 25
- c) 50
- d) 75

89. With a sole proprietorship, personal liability for debt and negligence is

- a) limited
- b) limited to the amount invested in the business
- c) unlimited
- d) limited for the first five years of operation

90. A employee grosses \$750 per week. What is the amount of Social Security tax that the employer must pay

- a) \$4.50
- b) \$9.00
- c) \$90.00
- d) \$46.50

91. The Americans with Disabilities Act prohibits employers from discriminating against people with which of the following condition_____

- a) broken leg
- b) severe cold
- c) broken arm
- d) epilepsy

92. An employer who has a history of collecting less than \$50,000 during a quarter, must deposit the tax withholdings by_____ or on the next banking day if the due date falls on a holiday or weekend.

- a) the last day of the month taxes are collected
- b) the 10th of the following month taxes are collected
- c) the 15th of the following month taxes are collected
- d) The last day of the following month taxes are collected

93. The Family and Medical Care Act applies to employers of _____ or more people

- a) 1
- b) 15
- c) 50
- d) 10

94. Which of the following is not a factor when determining a workers compensation insurance rate

- a) nature of the business
- b) frequency of accidents
- c) age of the employee

d) hazards likely to occur in the business

95. If a construction manager hires an electrician, the electrician becomes a/an

- a) subcontractor
- b) prime contractor
- c) employee
- d) oligopoly

96. A contract is _____

- a) a promise to pay for work completed
- b) a legal agreement that may be withdrawn anytime after execution.
- c) a legal binding agreement between two or more persons
- d) simply a piece of paper.

97. An injury or illness that is not work related _____

- a) must be reported to OSHA
- b) does not need to be recorded
- c) needs to be recorded but not reported to OSHA
- d) is covered by OSHA regulations

98. General and administrative expenses are considered _____

- a) project overhead
- b) company overhead
- c) direct costs
- d) all of the above

99. Retained earnings are commonly listed as _____ on a balance sheet

- a) assets
- b) liabilities
- c) expenses
- d) owners equity

100. When federal payroll taxes are paid 20 days late the penalty is _____ percent of the amount due

- a) 2
- b) 5
- c) 10
- d) 15

101. Which statement tells you where the money came from and where it went.

- a) balance sheet
- b) income statement
- c) statement of cash flows
- d) profit and loss statement

102. A fully depreciated \$30,000 truck with a salvage value of \$5000 is sold for

- \$8000. The accounting entry would be _____
- a) \$8000 gain on sale of asset
 - b) \$13,000 gain on sale of asset
 - c) \$3000 gain on sale of asset
 - d) \$5000 gain on sale of asset
103. Conspiring with others to fix the outcome of a bid is called _____
- a) bid shopping
 - b) bid chiseling
 - c) bid shaving
 - d) bid rigging
104. To be binding a contract requires _____
- a) a lawful object
 - b) mentally competent parties
 - c) all parties having reached the age of majority
 - d) all the above
105. A form W-4 contains
- a) immigration status information
 - b) withholding tax information
 - c) medical information
 - d) union application information
106. A person who is paid by the job and sets their own hours is a/an _____
- a) employee
 - b) supervisor
 - c) independent contractor
 - d) administrator
107. A specification that tells you exactly how to build a particular aspect of work is called a _____
- a) performance specification
 - b) design specification
 - c) project specification
 - d) plan specification
108. Under the Immigration Reform and Control Act, which of the following documents is evidence of employee eligibility.
- a) drivers license with photo
 - b) certificate of naturalization
 - c) United States passport
 - d) original Social Security card
109. Form 1099 must be distributed to contractors no later than _____
- a) January 15th
 - b) January 31st

- c) February 15th
- d) February 28th

110. A written contract may be _____

- a) on an AGC form
- b) on an AIA form
- c) on any piece of paper
- d) all of the above

111. A company's workers compensation insurance rate is \$12.50 per \$100 paid in wages and salaries. If the company's annual payroll is \$234,000, what will the worker's compensation bill be? _____

- a) \$2925
- b) \$29,250
- c) \$4680
- d) \$46,800

112. By ignoring safety regulations _____

- a) the company is exempted from law suits
- b) the company is exempted from fines
- c) the company may be barred from bidding on contracts
- d) the company is relieved of liability for an employees lingering health problems

113. ABC Heating has estimated a job to cost \$5800. Its company overhead is 26% and it wishes to make a profit of 25%. What should be the bid price of the job?

- a) \$11,836
- b) \$8,758
- c) \$7,333
- d) \$10,643

114. Which of the following exclusions are commonly found in a comprehensive general liability policy _____

- a) pollution
- b) bodily injury to non employees
- c) property damage to others
- d) accidents to others on premises

115. In order to ensure a person is a legal citizen, the employer must file an I-9 Form with _____ days of hire

- a) 2
- b) 3
- c) 5
- d) 30

116. Once in the blood, lead is distributed to the _____

- a) liver
- b) teeth
- c) none of the above
- d) both of the above

117. The most important need for a contract is _____

- a) to have a document to file at the courthouse
- b) to eliminate written job specifications
- c) file suit against suppliers
- d) to prevent disputes

118. Which bond protects the owner (buyer) from faulty workmanship after completion

- a) bid bond
- b) performance bond
- c) payment bond
- d) maintenance bond

119. OSHA citations issued to employers must be posted near the place of violation for a period of _____ or until the violation is remedied.

- a) 1 week
- b) 2 weeks
- c) 3 days
- d) 10 days

120. Under OSHA regulations, contractors are not obligated to their employees to _____

- a) instruct the safe use of equipment
- b) instruct proper procedures to avoid injury
- c) provide first aid services for every employee
- d) provide transportation to the jobsite

121. Which of the following is a direct cost? _____

- a) office manager
- b) advertising
- c) insurance
- d) labor

122. Whom of the following must be paid one and one-half their regular hourly rate if they work overtime _____

- a) outside sales person
- b) manager
- c) teacher
- d) janitor

123. The Occupational and Safety Health Act requires all states to _____

- a) adopt the OSHA regulations

- b) Have a health and safety plan at least as effective as OSHA
- c) cover employees with workers compensation insurance
- d) allows states to have less effective health and safety laws

124. An accounting system that records income only when it is actually received is on a _____

- a) cash basis
- b) accrual basis
- c) on-time basis
- d) FIFO basis

125. An advantage of a partnership over a sole proprietorship is _____

- a) each partner has limited liability for business debt
- b) each partner shares the risk of operating a business
- c) each partner receives dividends
- d) each partner must own an equal share of the business

126. The Miller Act requires performance bonds on public projects valued at more than \$_____

- a) 300,000
- b) 200,000
- c) 100,000
- d) 50,000

127. A document that provides a record of day to day job site activities is called a _____

- a) daily ledger
- b) daily journal
- c) daily job log
- d) daily record book

128. A contract states that Acme Company will install an air conditioner for \$6000. What in the contract is "consideration"?

- a) only the air conditioner
- b) only the \$6000
- c) neither
- d) both

129. The Civil Rights Act applies to employers of _____ or more people

- a) 0
- b) 1
- c) 5
- d) 15

130. For employees that have been exposed to hazardous materials and have worked less than one year., The company _____

- a) must record but not maintain records

- b) must maintain records for 6 months
- c) must maintain records for 5 years
- d) must maintain records for 30 years

131. Using the straight line method for calculating depreciation expense. What would be the yearly depreciation expense for a \$30,000 truck, bought on January 1, with a five year useful life and a \$6000 salvage value

- a) \$6000
- b) \$7200
- c) \$5000
- d) \$4800

132. Emergency action plans may be communicated orally if the company has _____ or fewer employees

- a) 10
- b) 5
- c) 15
- d) 20

133. Employers with an accumulated tax liability of less than \$2500 for the quarter _____.

- a) may remit the amount with Form 941
- b) must deposit the amount by the 10th of the following month.
- c) must deposit the amount by the 15th of the following month.
- d) May remit the amount with Form 940.

134. An employee makes \$35,000 for the year. what is the amount of FUTA, if paid on time

- a) \$2170
- b) \$280
- c) \$56
- d) \$109

135. If an employers has a question as to whether an individual's status is that of independent contractor or an employee, he may file a _____ with the IRS to get a ruling.

- a) Form SS-8
- b) Form W-4
- c) Form W-2
- d) Form I-9

136. Which bond keeps the property free of liens and unpaid subcontractors and suppliers

- a) bid bond
- b) performance bond
- c) payment bond
- d) completion bond

137. When a contractor supplies all the requirements of a project, including financing, permitting and land, the contract is considered to be _____
- a) design/build
 - b) turnkey
 - c) traditional
 - d) cost plus
138. Employers who willfully violate the Fair Labor Standards Act are subject to criminal and civil prosecution with fines up to \$ _____
- a) 1000
 - b) 5000
 - c) 10,000
 - d) 25,000
139. An income statement shows the _____.
- a) assets and liabilities over a period of time
 - b) assets and liabilities on a given date
 - c) profit or loss over a period of time
 - d) profit or loss on a given date
140. Which of the following should not be included as a project cost
- a) barricades
 - b) field office utilities
 - c) job site toilets
 - d) company secretary
141. According to the Clean Water Act, A phase 1 project is comprised of _____ acres
- a) 2 or more
 - b) 5 or more
 - c) 15 or more
 - d) 30 or more
142. Insurance policies that extends the limits of your coverage is called _____
- a) comprehensive
 - b) umbrella
 - c) waivers
 - d) warranties
143. A company with 20 employees, accused of a serious OSHA violation and fined \$20,000. may have the fine reduced by as much as _____
- a) \$12,000
 - b) \$5000
 - c) \$6000
 - d) \$8000

144. Harry provides extra funds to a general partnership, but does not take an active roll in the day-to-day operations of the business. Harry is now part of a/an _____

- a) S corporation
- b) General Partnership
- c) Limited partnership
- d) Joint venture

145. An Employee earns \$750 for the week, His/her federal withholding tax is \$72, State with hold is \$6. What is his take home pay after social security and Medicare is deducted

- a) \$614.62
- b) \$576.96
- c) \$674.15
- d) \$497.60

146. A fixed percentage of each payment that is kept until final completion is called _____

- a) retained earnings
- b) a retainage
- c) forced savings
- d) guarantee

147. Materials that may be considered hazardous include batteries, used oil, cleaning solvents and _____

- a) rusted metal studs
- b) used fuel
- c) excess lumber
- d) fiberglass plumbing fixtures

148. A violation of an essential agreement in a contract is considered a/an _____

- a) simple breach
- b) immaterial breach
- c) material breach
- d) admittance

149. Your insurance carrier should have a minimum rating of _____

- a) A
- b) AA
- c) AAA
- d) AA

150. For a plumbing company, sale of a _____ is represented as other income on an income statement

- a) old truck

- b) water heater
- c) lavatory
- d) a plumbing job

151. Comprehensive general liability insurance will generally cover property rented by your company

- a) true
- b) false

152. Which of the following is not an element of a contract

- a) offer
- b) negotiation
- c) acceptance
- d) consideration

153. Waste may be considered hazardous if it _____

- a) is non corrosive
- b) has a PH of 7
- c) is ignitable
- d) non reactive

154. Business trusts are created, generally, to hold or protect property for _____

- a) owners
- b) beneficiaries
- c) stockholders
- d) customers

155. For reporting taxes, limited liability companies may be treated as _____

- a) corporations
- b) sole proprietorships
- c) partnerships
- d) all the above

156. A/An _____ shows the financial condition of a company at a given point in time.

- a) income statement
- b) profit and loss statement
- c) balance sheet
- d) statement of cash flows

157. Changes to plans and specifications before the bids are due are called _____ and become part of the contract

- a) addenda
- b) change orders
- c) alternates
- d) updates

158. To receive payment from a bond, second tier contractors must give written notice to the contractor within _____ days of last providing labor or material

- a) 60
- b) 90
- c) 120
- d) 180

ANSWERS

- 1. b
- 2. d
- 3. d
- 4. b
- 5. b
- 6. d
- 7. b
- 8. c
- 9. c
- 10. d
- 11. b*
- 12. a
- 13. c
- 14. b
- 15. a
- 16. a
- 17. d*
- 18. c *
- 19. c
- 20. d
- 21. d
- 22. b
- 23. d
- 24. b
- 25. a
- 26. d*
- 27. a
- 28. a
- 29. c
- 30. b
- 31. c
- 32. b
- 33. c
- 34. a
- 35. c
- 36. a
- 37. d
- 38. d

11.

New sales = $675,000 + 55,000 = \$730,000$

old overhead = $.22 \times 675,000 = \$148,500$

new over head = $148,500 + 14,000 = \$162,500$

new overhead rate = $162,500/730,000 = .2226$ rounded to

17.

$62,000/367,000 = .1689$ rounded to 16.9%

18.

profitability ratio = net income/revenue

$42,000/890,000 = .047$, move decimal 2

places to right for percentage = 4.7

26.

Although it is not specifically stated in the NASCLA book, LLC are treated as sole proprietors or partnerships.

- 39. c
- 40. a
- 41. a
- 42. c
- 43. b
- 44. a
- 45. d
- 46. b
- 47. a
- 48. c
- 49. b
- 50. c
- 51. c
- 52. c
- 53. d
- 54. a
- 55. a
- 56. a
- 57. a
- 58. d*
- 59. a
- 60. b
- 61. b
- 62. a
- 63. a*
- 64. c
- 65. b
- 66. d
- 67. b
- 68. b
- 69. c
- 70. c
- 71. c
- 72. d
- 73. c
- 74. c
- 75. c
- 76. a
- 77. c
- 78. b
- 79. c*
- 80. b
- 81. b
- 82. b
- 83. a
- 84. c
- 85. c

58.
equity = assets minus
liabilities

63.
equity = assets minus liabilities
 $258,000 - 210,000 = 48,000$
Debt to equity ratio = total debt/equity
 $63,000 / 48,000 = 1.31$

79.
 $\$125,000 / .30 = \$416,666$

- 86. b
- 87. a
- 88. a
- 89. c
- 90. d*
- 91. d
- 92. c
- 93. c
- 94. c
- 95. b
- 96. c
- 97. b
- 98. b
- 99. d
- 100. c
- 101. c
- 102. c*
- 103. d
- 104. d
- 105. b
- 106. c
- 107. b
- 108. d
- 109. d
- 110. d
- 111. b
- 112. c
- 113. a*
- 114. a
- 115. b
- 116. d
- 117. d
- 118. d
- 119. c
- 120. d
- 121. d
- 122. d
- 123. b
- 124. a
- 125. b
- 126. c
- 127. c
- 128. d
- 129. d
- 130. a
- 131. d*
- 132. a

90.
 $.062 \times \$750 = \46.50

102.
 The truck is shown on the company books as a \$5000 asset. Since it is sold for \$8000, it will be a \$3000 gain

113.
 ABC must make 51% gross profit (markup) to cover both overhead and profit (25% + 26%)
 The correct method to calculate sales price is as follows:
 Deduct the markup % from 100% (100-51 = 49%), then divide the cost of the job by the resulting %, (\$5800/.49 = \$11,836)

131.
 $\$30,000 \text{ minus } \$6000 = \$24,000$
 $\$24,000 / 5 = \4800

- 133. a
- 134. c*
- 135. a
- 136. c
- 137. b
- 138. c
- 139. c
- 140. d
- 141. b
- 142. b
- 143. a
- 144. c
- 145. a*
- 146. b
- 147. b
- 148. c
- 149. d
- 150. a
- 151. b
- 152. b
- 153. c
- 154. b
- 155. d
- 156. c
- 157. a
- 158. b

134.
FUTA tax is limited to the first \$7000.
 $\$7000 \times .008 = \56

145.
SS 6.2% + Medicare 1.45% = 7.65%
 $7.65\% = .0765$
 $.0765 \times \$750 = \57.38
 $\$750.00 - \$57.38 - \$72.00 - \$6.00 = \$614.62$