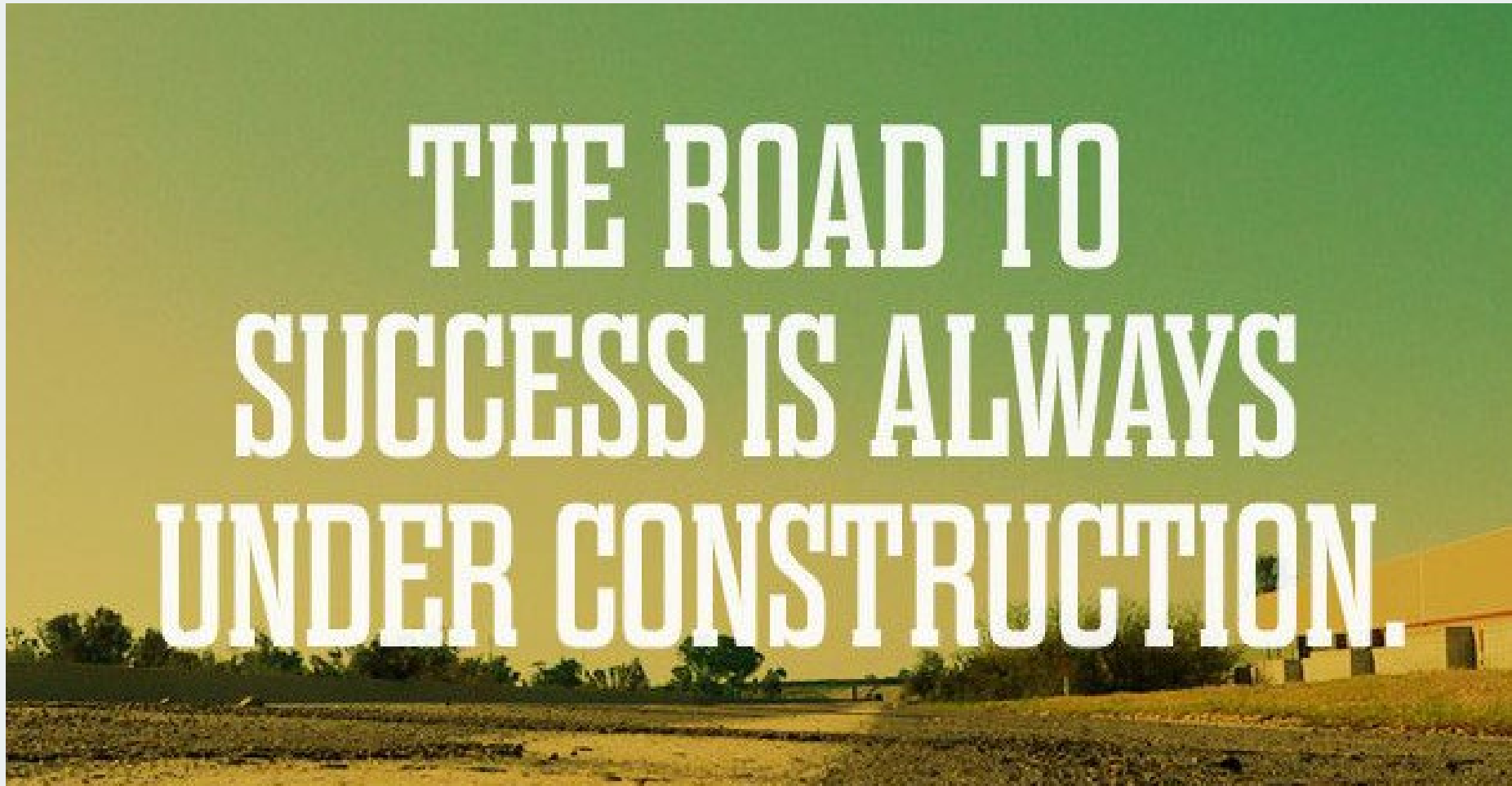


# Business and Law Course



# Course Outline

- ☐ **Testing Day – What to Expect**
- ☐ Review Table of Contents
- ☐ Highlight Textbook
- ☐ Test Taking Strategies
- ☐ Practice Test / Business Math
- ☐ Answer Key & Certificates

# Register for your Test

- <https://www.provexam.com/register> or
- call 877-228-3926 (6 a.m. – 10 p.m.)
- Register for the Utah Contractor Business & Law Exam
  - ✓ Create account
  - ✓ Book a test
- 18 locations from St. George to Logan
  - ✓ Dixie State University

<https://utahboi.provexam.com/UtahContracting>

# Testing Day – The Exam

- **Examroom** remote testing available
- Take the test on your own computer
  - Operating system on computer needs to be recent (less than 3-4 years old)
  - Works on a MAC, PC, or Chromebook
  - Need either a Chrome or Firefox browser (Chrome works best)
  - Need a functioning computer web-camera and microphone
  - Need a good consistent Internet connection capable of uploading files in excess of 3 Mbps
- Test proctor will greet and check you in and observe you during the test

# Register for your Test

- Examination Fee is \$68
- Forfeit fee if you:
  - Don't cancel at least 3 days before your exam date
  - Do not appear at the exam
  - Arrive late
  - Do not present proper identification

# Testing Day – Check In

- Arrive at least 15 minutes early for sign in and identification
- Present a VALID form of government issued identification (driver's license, state ID, passport, military ID) which bears your signature and has your photograph
- Sign a test center log
- Have your photograph taken

# Testing Day - Security

- No prohibited items
- No electronic devices such as cell phones, recording devices, electronic watches, tablets, computers, etc.
- No bulky clothing including coats, hoods, or overcoats (close-fitting jackets and sweatshirts are okay)
- No hats or headgear
- No personal items such as purses, notebooks, backpacks, wallets, etc.
- You can bring your own pencil – bring 2 in case one breaks

# Testing Day - Security

- Calculators = silent, non-programmable, battery operated, no paper tape, no alphabet keyboard, or there is a calculator on the computer during the test
- No smoking, eating, or drinking
- No accompanying persons in the building or on the property
- Secure storage provided for personal items
- You can request a piece of paper from Prov for notes



# Testing Day – The Exam

- Administered via computer using mouse and keyboard
- 60 questions
- Must receive a score of at least 70%
- You will receive score report immediately following completion

<https://www.youtube.com/watch?v=h3T9svnIdLY&feature=youtu.be>

# Testing Day – The Exam

Subject Area	# of Questions
Business Organizations	4
Licensing	10
Estimating and Bidding	6
Contract Management	6
Project Management	5
Labor Laws	6
Lien Laws	3
Financial Management	6
Risk Management	5
Tax Laws	5
Safety	4

# Testing Day – The Exam

- Approved reference material = *Utah Contractor Education Book*, The Home Builders Association of Utah  
AND *NASCLA Contractors Guide to Business, Law and Project Management, Utah, 4<sup>th</sup> Edition*
- Reference material may be highlighted, underlined, and/or indexed with permanent index tabs.
- No other markings or writing and no additional papers (loose or attached)

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# Study Plan

- Determine the most important study material – don't waste time reviewing material you already know.
- Divide material into manageable chunks.
- Study over time – don't cram.
- Block out study times on a calendar to decrease stress and procrastination.
- Plan 10-minute breaks every hour.
- Self Test – set a timer and pretend it's the real thing.

[https://www.usu.edu/asc/studysmart/pdf/effective\\_study\\_plans.pdf](https://www.usu.edu/asc/studysmart/pdf/effective_study_plans.pdf)

# Test Taking Strategies

## Before the Test Tips

- Get a good night's sleep and eat a high protein breakfast. Drink plenty of water.
- Don't study right before the test. Concentrate on being calm and mentally accessing the information you have already studied.
- Get to the test a little early.
- Don't engage in negative talk with other students before the test, such as "I'm so nervous – I don't know if I studied enough."
- Eliminate negative thoughts or self-talk by replacing them with a positive affirmation, like "I am prepared for the test and I will do well" or "I am smart – I can do this."
- Make a decision to ignore students who finish the test before you. Research shows that students who leave early usually don't score as well as those who take more time.



# Test Taking Strategies

## Multiple Choice Test Tips

- **Read the question**, think of the answer, and then find it in the choices.
- Pay careful attention to negative words in the question - these are distracters.
- Read all the options, before choosing.
- Don't dwell on the ones you don't know.

# Test Taking Strategies

## Multiple Choice Test Tips

Go back to the questions you were unsure of. If the answer hasn't come to you, use one of the strategies below to help you answer the question.

- Look for the one that is grammatically correct.
- Look for similar words in the question and answer.
- Look for the longest and most specific answer.
- Try the “True or False” technique.
- Stick to the subject matter of the course.
- Watch out for negatives and extreme wording.
- Numbers in the middle range are usually correct.
- If two options are opposite, the answer is probably one of them.
- Research shows the most commonplace answer is “C” followed by “B”.

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# Business Math

## Math Test!

Work on the 13 questions listed here, and then we'll review the answers together.

(hand out practice test)

### Questions

# 11

# 17

# 18

# 22

# 24

# 25

# 26

# 29

# 30

# 35

# 46

# 51

# 56

# Business Math

## Question #11

There is an accident on a job site.

- The company's general liability insurance deductible is \$2,500
- The employee's medical bills are \$5,000
- Damage to the company's equipment is \$2,000
- A passerby is injured and incurs medical bills of \$1,500

How much will the company's general liability insurance policy pay for the incident?

- A. \$0
- B. \$1,500
- C. \$2,500
- D. \$8,500

# Business Math

## Question #11

There is an accident on a job site.

- The company's general liability insurance deductible is \$2,500
- The employee's medical bills are \$5,000
- Damage to the company's equipment is \$2,000
- A passerby is injured and incurs medical bills of \$1,500

How much will the company's general liability insurance policy pay for the incident?

- A. \$0
- B. \$1,500
- C. \$2,500
- D. \$8,500

## Answer

Employee medical bills are covered by workers comp, not general liability = \$0

Company equipment is covered by property insurance, not general liability = \$0

Passerby injury is less than \$2,500 deductible = \$0

Total = \$0

# Business Math

## Question #17

Using the Accrual Basis of accounting, what is the net income for March if:

- \$6,000 in income is invoiced in March
  - \$5,000 in income is received in March
  - \$2,500 in expenses are incurred in March
  - \$2,000 in expenses are paid in March
- A. \$4,000  
B. \$3,500  
C. \$3,000  
D. \$2,500

# Business Math

## Question #17

Using the Accrual Basis of accounting, what is the net income for March if:

- \$6,000 in income is invoiced in March
- \$5,000 in income is received in March
- \$2,500 in expenses are incurred in March
- \$2,000 in expenses are paid in March

- A. \$4,000
- B. **\$3,500**
- C. \$3,000
- D. \$2,500

## Answer

Income invoiced  
– Expenses incurred  
= Net income

$$\$6,000 - \$2,500 = \mathbf{\$3,500}$$



# Business Math

## Question #18

If a company has:

- Current assets \$80,000
- Fixed assets \$75,000
- Current liabilities \$40,000
- Long term liabilities \$60,000

What is their working capital?

- A. \$40,000
- B. \$55,000
- C. \$95,000
- D. \$115,000

# Business Math

## Question #18

If a company has:

- Current assets \$80,000
- Fixed assets \$75,000
- Current liabilities \$40,000
- Long term liabilities \$60,000

What is their working capital?

- A. \$40,000
- B. \$55,000
- C. \$95,000
- D. \$115,000

## Answer

Working Capital

= Current Assets – Current  
Liabilities

= \$80,000 - \$40,000

= \$40,000

# Business Math

## Question #22

If a company has:

- Current assets \$50,000
- Inventory \$10,000
- Fixed assets \$30,000
- Current liabilities \$25,000
- Long term liabilities \$20,000

What is the company's quick ratio?

- A. .4
- B. .5
- C. 1.6
- D. 2.4

# Business Math

## Question #22

If a company has:

- Current assets \$50,000
- Inventory \$10,000
- Fixed assets \$30,000
- Current liabilities \$25,000
- Long term liabilities \$20,000

What is the company's quick ratio?

- A. .4
- B. .5
- C. **1.6**
- D. 2.4

## Answer

Quick Ratio

$$= (\text{Current assets} - \text{Inventory}) / \text{Current liabilities}$$

$$= (\$50,000 - \$10,000) / \$25,000$$

$$= \mathbf{1.6}$$

# Business Math

## Question #24

A unit price contract has the following terms:

Product #1 = \$60 each

Product #2 = \$100 each

Product #3 = \$200 each

Markup for overhead and profit = 35%

How much should the contractor charge for providing 20 of product #1, 40 of product #2, and 30 of product #3?

- A. \$11,200
- B. \$15,120
- C. \$15,680
- D. \$16,470

# Business Math

## Question #24

A unit price contract has the following terms:

Product #1 = \$60 each

Product #2 = \$100 each

Product #3 = \$200 each

Markup for overhead and profit = 35%

How much should the contractor charge for providing 20 of product #1, 40 of product #2, and 30 of product #3?

- A. \$11,200
- B. **\$15,120**
- C. \$15,680
- D. \$16,470

## Answer

$$20 \times \$60 = \$1,200$$

$$40 \times \$100 = \$4,000$$

$$30 \times \$200 = \$6,000$$

$$\text{Total } \$11,200$$

$$\$11,200 \times 1.35 = \mathbf{\$15,120}$$

# Business Math

## Question #25

A cost-plus contract has the following terms:

- The project owner pays for direct labor and materials costs plus a markup of 30% on those direct costs.
- The contractor receives a bonus of \$300 per day for each day the project is completed early.
- The contractor receives a bonus of 20% of the savings if the total cost including markup is under \$80,000.

What total amount is due to the contractor if the results of the project are as follows?

- Final costs for direct labor and materials are \$50,000.
  - The project is completed 10 days early.
- A. \$59,000  
B. \$67,000  
C. \$71,000  
D. \$75,000

# Business Math

## Question #25

A cost-plus contract has the following terms:

- The project owner pays for direct labor and materials costs plus a markup of 30% on those direct costs.
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  - The project is completed 10 days early.
- A. \$59,000  
B. \$67,000  
C. **\$71,000**  
D. \$75,000

## Answer

$$\$50,000 \times 1.3 = \$65,000$$

$$\$15,000 \times .2 = \$3,000$$

$$10 \times \$300 = \$3,000$$

$$\text{TOTAL} = \mathbf{\$71,000}$$



# Business Math

## Question #26

A project has a total contract price of \$120,000. Retainage has been held back at 5%. The contractor previously completed and received payment for 80% of the work. Now the project is complete. What is the amount of the final payment the contractor should request?

- A. \$18,400
- B. \$24,000
- C. \$28,800
- D. \$30,000

# Business Math

## Question #26

A project has a total contract price of \$120,000. Retainage has been held back at 5%. The contractor previously completed and received payment for 80% of the work. Now the project is complete. What is the amount of the final payment the contractor should request?

- A. \$18,400
- B. \$24,000
- C. **\$28,800**
- D. \$30,000

## Answer

$$\$120,000 \times 80\% = \$96,000$$

$$\$96,000 \times 5\% = \$4,800 \text{ retainage}$$

$$\$96,000 - \$4,800 = \$91,200$$

$$\$120,000 - \$91,200 = \mathbf{\$28,800}$$

# Business Math

## Question #29

How much additional money should a change order request in the following situation?

- The change costs the contractor an additional \$3,500 in labor and materials and overhead.
  - The change reduces other labor and overhead costs by \$1,000.
  - The contract allows the contractor to markup all costs on a change order 20%.
- A. \$2,500  
B. \$3,000  
C. \$3,500  
D. \$4,200

# Business Math

## Question #29

How much additional money should a change order request in the following situation?

- The change costs the contractor an additional \$3,500 in labor and materials and overhead.
- The change reduces other labor and overhead costs by \$1,000.
- The contract allows the contractor to markup all costs on a change order 20%.

- A. \$2,500
- B. **\$3,000**
- C. \$3,500
- D. \$4,200

## Answer

$$\$3,500 - \$1,000 = \$2,500$$

$$\$2,500 \times 1.2 = \mathbf{\$3,000}$$

# Business Math

## Question #30

A contractor estimates a project as follows:

- Equipment cost = \$500
- Direct labor = \$4,000
- Material = \$5,000
- Project overhead = 30% of direct labor
- General overhead = 15% of direct labor and materials

The project owner offers to pay \$13,000.

What is the contractor's profit or loss?

- A. Profit of \$650
- B. Profit of \$950
- C. Loss of \$650
- D. Loss of \$950

# Business Math

## Question #30

A contractor estimates a project as follows:

- Equipment cost = \$500
- Direct labor = \$4,000
- Material = \$5,000
- Project overhead = 30% of direct labor
- General overhead = 15% of direct labor and materials

The project owner offers to pay \$13,000.

What is the contractor's profit or loss?

- A. Profit of \$650
- B. Profit of \$950
- C. Loss of \$650
- D. Loss of \$950

## Answer

$$\$4,000 \times 30\% = \$1,200$$

$$\$9,000 \times 15\% = \$1,350$$

$$\$500 + \$4,000 + \$5,000 + 1,200 + \$1,350 = \$12,050$$

$$\$13,000 - \$12,050 = \$950$$

# Business Math

## Question #35

Calculate float days for the following project:

- Contract signed June 2<sup>nd</sup>
  - Materials delivered June 7<sup>th</sup>
  - Labor begins Monday June 12<sup>th</sup>
  - Scheduled completion date June 30<sup>th</sup>
  - Estimated 8 labor days are needed
  - No overtime or weekend labor is available
- A. 5 float days  
B. 6 float days  
C. 7 float days  
D. 8 float days

# Business Math

## Question #35

Calculate float days for the following project:

- Contract signed June 2<sup>nd</sup>
- Materials delivered June 7<sup>th</sup>
- Labor begins Monday June 12<sup>th</sup>
- Scheduled completion date June 30<sup>th</sup>
- Estimated 8 labor days are needed
- No overtime or weekend labor is available

- A. 5 float days
- B. **6 float days**
- C. 7 float days
- D. 8 float days

## Answer

M	T	W	Th	F
5	6	7	8	9
12	13	14	15	16
19	20	21	22	23
26	27	28	29	30



# Business Math

## Question #46

A contract includes a liquidated damages clause that awards the project owner \$1,000 per day for each day the job exceeds 90 days. It also awards the contractor a bonus of \$1,000 per day for each day the job is completed before 90 days. The job is delayed 7 days by weather and is completed on day 94. No extension of time was requested or granted. Which of the following is true?

- A. The contractor owes \$4,000 in liquidated damages
- B. The contractor should receive a \$3,000 bonus
- C. The contractor owes \$7,000 in liquidated damages
- D. The contractor should receive a \$7,000 bonus

# Business Math

## Question #46

A contract includes a liquidated damages clause that awards the project owner \$1,000 per day for each day the job exceeds 90 days. It also awards the contractor a bonus of \$1,000 per day for each day the job is completed before 90 days. The job is delayed 7 days by weather and is completed on day 94. No extension of time was requested or granted. Which of the following is true?

- A. The contractor owes \$4,000 in liquidated damages
- B. The contractor should receive a \$3,000 bonus
- C. The contractor owes \$7,000 in liquidated damages
- D. The contractor should receive a \$7,000 bonus

# Business Math

## Question #51

A laborer employee earns \$10 per hour. During a 2-week period, the employee works 35 hours in week 1 and 45 hours in week 2. What will their gross pay be for the 2 weeks?

- A. \$750
- B. \$800
- C. \$825
- D. \$850

# Business Math

## Question #51

A laborer employee earns \$10 per hour. During a 2-week period, the employee works 35 hours in week 1 and 45 hours in week 2. What will their gross pay be for the 2 weeks?

- A. \$750
- B. \$800
- C. **\$825**
- D. \$850

## Answer

Week 1:

$$35 \times \$10 = \$350$$

Week 2:

$$40 \times \$10 = \$400$$

$$5 \times \$15 = \$75$$

$$\$400 + \$75 = \$475$$

$$\$350 + \$475 = \mathbf{\$825}$$

# Business Math

## Question #56

A C Corporation has gross revenue of \$120,000 and deductible expenses of \$70,000. The corporate tax rate is a flat 21%. What is the corporation's after-tax profit?

- A. \$35,300
- B. \$39,500
- C. \$50,000
- D. \$94,800

# Business Math

## Question #56

A C Corporation has gross revenue of \$120,000 and deductible expenses of \$70,000. The corporate tax rate is a flat 21%. What is the corporation's after-tax profit?

- A. \$35,300
- B. **\$39,500**
- C. \$50,000
- D. \$94,800

## Answer


$$\$120,000 - \$70,000 = \$50,000$$

$$\$50,000 \times 21\% = \$10,500$$

$$\$50,000 - \$10,500 = \mathbf{\$39,500}$$

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The man on top of the  
mountain didn't fall there.

Vince Lombardi

**Hand Out Answer Key and Certificates**