DO NOT WRITE ON TEST

BUSINESS PROFESSIONALS of AMERICA
Giving Purpose to Potential

FINANCIAL MATH & ANALYSIS CONCEPTS
~OPEN EVENT~
(190)

REGIONAL 2023

TOTAL POINTS _____100 Points

Test Time: 60 minutes

GENERAL GUIDELINES:

Failure to adhere to any of the following rules will result in disqualification:

1. Member must hand in this test booklet and all printouts if any. Failure to do so will result in disqualification.
2. No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests (handwritten, photocopied, or keyed) are allowed in the testing area.
3. Electronic devices will be monitored according to ACT standards.
4. For any interest calculations, assume a 360-day year.
5. Unless otherwise stated, assume that all plant assets were purchased on January 1.
6. Unless otherwise stated, assume that the overtime rate is 1.5 regular time pay for any hours worked in excess of 40 hours per week.

Directions: Identify the letter of the choice that *best* completes the statement or answers the question.

1. Noah is paid 4% commission on the first $10,000 of monthly sales and 10% on all sales over $10,000. Last month his sales were $38,000. What was his commission?
    - A. $2,000
    - B. $2,800
    - C. $3,200
    - D. $4,200

2. Anika earned $43,680 last year. Her usual work schedule is 50 hours a week. What was her average weekly income?
    - A. $840.00
    - B. $873.60
    - C. $940.00
    - D. $973.60

3. Truong is paid a salary of $4,600 a month. What are his total annual earnings?
    - A. 46,000
    - B. $51,400
    - C. $55,200
    - D. $64,000

4. Find the product of $44,098 x 25.7%.
    - A. $1,133.31
    - B. $11,333.19
    - C. $113,331.90
    - D. $1,333,190

5. Divide to the nearest hundredth. $10,500 / $35,400.
    - A. 0.029
    - B. 0.29
    - C. 0.30
    - D. 0.31

6. A vendor had these cash receipts in five days: $328.50, $410.40, $379, $326.25, $387.75. What was the vendor's total cash receipts for the five days?
    - A. $1,245.60
    - B. $1,587.20
    - C. $1,831.90
    - D. $2,234.90

7. Interest is money paid to an individual or institution for the privilege of using their money.
    A. True
    B. False

8. Giselle's bank statement shows a balance of $539.22. Checks outstanding were #841 for $29.67, #843 for $89.02 and #844 for $9.76. A $130 deposit was outstanding. After reconciling her bank statement, what is the actual amount in her account?
    A. $410.77
    B. $539.22
    C. $540.77
    D. $667.77

9. The amount of money borrowed on a promissory note is the face, or _____.
    A. interest
    B. rate
    C. time
    D. principal

10. Find the interest to be paid for a 2-year note at 15% if you borrowed $2,500.
    A. $75
    B. $750
    C. $90
    D. $900

11. A service station mechanic took 3 hours to repair a car. The service charge was $65 an hour. Two parts were replaced at a cost of $117.98 and $49.39. The state has a sales tax of 4% charged on goods, but not labor. Find the total bill.
    A. $362.37
    B. $369.06
    C. $402.37
    D. $449.06

12. You can buy file folders in boxes of 100 for $8.99. If you bought 600 file folders, what is your cost?
    A. $53.94
    B. $67.68
    C. $95.24
    D. $108.04

13. A lawnmower sells for $489. The sales tax is 5.1%. What is the total cost of the mower?
    A. $464.06
    B. $489.00
    C. $513.94
    D. $524.34

14. Lu Yang expects to earn $64,700 next year. Last year he saved 12% of his income. If he saves the same percent this year, how much will Lu save?
    A. $6,470
    B. $6,940
    C. $7,240
    D. $7,764

15. Shamika bought 200 shares of stock from her broker at $24.50. The broker charged $123.51 commission. What is the total cost of the stock?
    A. $4900
    B. $5023.51
    C. $6200.51
    D. $6212.51

16. Nellie earns a salary of $1,500 a month plus 5% commission on all sales. Last month her sales were $40,000. What was her gross income for the month?
    A. $1,700
    B. $2,000
    C. $3,500
    D. $4,700

17. The monthly health insurance premium provided by Lawanda's employer is $448, and she pays 20% of the cost. What annual amount does she pay for health insurance?
    A. $89.60
    B. $1057.20
    C. $1075.20
    D. $4,300.80

18. The _____ is the middle number in a set of data that is arranged in either ascending or descending order.
    A. median
    B. mode
    C. mean
    D. frequency

19. Capital investment is the amount of cash you originally invested plus anything you spent for improvements.
    A. True
    B. False

20. Bob bought a $135,000 term life insurance policy. He paid an annual premium of $1.65 per $1,000 of insurance. What annual premium did he pay?
    A. $1,650
    B. $1,350
    C. $524.45
    D. $222.75

21. Thomas has a regular hourly pay rate of $11.87 per hour. His overtime rate is time-and-a-half. What is his overtime rate?
    A. $15.21
    B. $17.81
    C. $18.41
    D. $19.71

22. Alexis went out to eat with her friends at a local diner. She always leaves an 18% tip. Her bill was $24.30. What did she leave for a tip?
    A. $2.43
    B. $3.46
    C. $4.37
    D. $4.87

23. Pedro is paid $18 for each computer she installs at customer offices. In the last 5 days, she has installed the following: 7, 6, 9, 8, 5. What gross did Pedro earn for the week?
    A. $630
    B. $680
    C. $720
    D. $780

24. The total amount of an employee's earnings is called net pay.
    A. True
    B. False

25. Gaston is paid a straight commission of 6.5% on all sales. Last month his sales were $105,000. What were his commission earnings last month?
    A. $682.50
    B. $1,365
    C. $4,598
    D. $6,825

26. Ashton is paid $4.25 for each wooden duck he paints that passes inspection. What is his pay on a day when he paints 38 ducks, 2 of which were rejected?
    A. $153
    B. $161.50
    C. $172.75
    D. $192.50

27. Amber went to get a new outfit for the upcoming school dance. She purchases a shirt for $42.95 and pants for $61.75. Tax in her city is 7.3%. What was her total purchase cost?
    A. $104.70
    B. $107.40
    C. $112.34
    D. $114.74

28. A standard deduction is a specific amount that can be deducted from taxable income. It is used in place of itemized deductions.
    A. True
    B. False

29. Last year, the Anderson's spent 12.5% on food. If they estimate that they will spend the same percent of their income for food next year, how much should they budget for food if their income is expected to be $78,500?
    A. $981.25
    B. $1,825.50
    C. $8,125.25
    D. $9,812.50

30. Tate's mom gave him $20 to go out for supper with his friends. His meal totaled $14.95. He always tips 18%. How much does Tate have left?
    A. $2.36
    B. $2.70
    C. $3.20
    D. $5.05

31. Jaxson bought a tool chest and tools on the installment plan for a total cost of $900. He paid $200 down and the rest in monthly installments of $28 each. How many months did it take Jaxson to pay for the tool chest and tools?
    A. 12
    B. 18
    C. 25
    D. 32

32. The _____ is the price of one item or one measure of the item.
    A. fixed price
    B. variable price
    C. unit price
    D. total price

33. How much is saved by buying a pack of 10 T-shirts for $33.49 rather by buying two packs of five T-shirts for $18.25 each?
    A. $3.01
    B. $3.31
    C. $4.01
    D. $4.31

34. What is the average amount you spend at Lola's Café if the last five visits you spent: $24.35, $32.45, $50.25, $18.50, $26.75?
    A. $25.40
    B. $30.46
    C. $32.41
    D. $34.53

35. Henry wants to buy a car that costs $18,980 in a state with a 6.25% sales tax. How much sales tax will he pay?
    A. $1,186.25
    B. $2,215.45
    C. $11,862.50
    D. $20,166.25

36. Alayna wants to buy a home that costs $380,000. She needs to put 20% down on her purchase. How much will the loan be for after the down payment has been paid?
    A. $76,000
    B. $146,000
    C. $304,000
    D. $380,000

37. Taan is making a budget and needs to know his total fixed costs per month. Taan has the following fixed costs: rent $650, car payment $225, phone payment $45, and insurance $125. How much does Taan have left over for variable expenses if he makes $1800 per month?
    A. $1140
    B. $1045
    C. $820
    D. $755

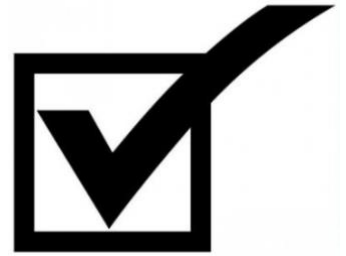38. The money paid to an insurance company for property insurance is the _____.
    A. annuity
    B. premium
    C. principle
    D. interest

39. Your policy has a face value of $30,000 with a $1000 deductible. How much will the insurance company pay if your loss is $7,800?
    A. $30,000
    B. $7,800
    C. $6,800
    D. $1,000

40. Sarah made $562 during the last week of January. Since Sarah's wages are paid in January, you are sure that her wages have not exceeded the social security earning limit. She is taxed on both social security and Medicare. Using the 7.65%, what is the total FICA tax?
    A. $4.30
    B. $42.99
    C. $54.36
    D. $61.25

41. The time worked beyond the end of a usual working day is called _____.
    A. commission
    B. per diem
    C. quota
    D. overtime

42. Seth worked 6 days last week as a temporary computer operator. His per diem rate was $120. What gross pay was Seth paid for the week?
    A. $720
    B. $600
    C. $580
    D. $420

43. Piper had a beginning balance in her bank account of $1,235. She made two deposits in the amounts of $125 and $250. Piper spent $25.50 and $140 on goods. What is her balance today?
    A. $1,240.50
    B. $1,444.50
    C. $1,610.00
    D. $1,825.50

44. Jose is paid $1.30 for each usable picture frame he produces. What was Jose's gross pay for the last week if he produced the following quantities of usable frames?

Monday	52
Tuesday	47
Wednesday	54
Thursday	50
Friday	45

    A. $454.00
    B. $398.60
    C. $322.40
    D. $268.40

45. The annual percentage rate (APR) is a percent that shows the ratio of finance charges to the amount financed.
    A. True
    B. False

46. Adam had $100 from his birthday to buy a concert ticket and a new t-shirt. The concert ticket was $65.95, and the t-shirt was $32.25. How much does Adam have left?
    A. $1.80
    B. $3.20
    C. $6.40
    D. $11.80

47. Willow works as a customer service representative and is paid $9.10 an hour. Willow worked 38 hours last week. What was her gross pay?
    A. $256.80
    B. $295.60
    C. $312.70
    D. $345.80

48. Huyn bought the following groceries: 2 cans of tuna at $.99 each, loaf of bread for $3.29, mayonnaise for $4.40 and a twelve pack of pop for $5.99. If he paid with a twenty-dollar bill, how much change did he receive?
    A. $4.34
    B. $5.33
    C. $14.67
    D. $15.66

49. Find the total cost of a pair of shoes that cost $89.99 in a state with a 4.25% sales tax and a city with a 1.5% sales tax.
    A. $95.74
    B. $95.16
    C. $94.45
    D. $93.26

50. Ansly gets paid 1.5 times her wage for any hours worked over 40. If Ansly makes $11.50 per hour, what was her gross pay last week if she worked 43 hours?
    A. $460.00
    B. $494.50
    C. $511.75
    D. $621.25

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TOTAL POINTS   _____100 Points

Test Time: 60 minutes

1.	C	26.	A
2.	A	27.	C
3.	C	28.	B
4.	B	29.	D
5.	C	30.	A
6.	C	31.	C
7.	A	32.	C
8.	C	33.	A
9.	D	34.	B
10.	B	35.	A
11.	B	36.	C
12.	A	37.	D
13.	C	38.	B
14.	D	39.	C
15.	B	40.	B
16.	C	41.	D
17.	C	42.	A
18.	A	43.	B
19.	A	44.	C
20.	D	45.	B
21.	B	46.	A
22.	C	47.	D
23.	A	48.	A
24.	B	49.	B
25.	D	50.	C