BUSINESS MATH

Overview
The ability to solve common business mathematical problems is a basic skill required by all prospective business employees. This event provides recognition for FBLA members who have an understanding of basic math functions needed in business.

This event is an individual objective test and only for members in *grades 9 and 10.*

Competencies and Task Lists
http://www.fbla-pbl.org/docs/ct/FBLA/BUSINESSMATH.pdf

Website Resources
- How to Calculate Depreciation
  http://www.assetaide.com/depreciation/calculation.html
- Markup
  http://www.321know.com/g84_max1.htm
- Meters and Liters: Converting to the Metric System of Measurements
  http://www.learner.org/interactives/dailymath/meters_liters.html
- The Metrics International System of Units
  http://www.wsdot.wa.gov/reference/metrics/factors.htm
- Top 6 Business Math Resources
  http://math.about.com/od/businessmath/tp/businessmathtp.htm

BUSINESS MATH SAMPLE QUESTIONS

1. Viola has saved $6690. She paid her college tuition of $2,988 for the first semester using her savings. What is Viola's savings account balance?
   a. $3,002
   b. $3,702
   c. $3,007
   d. $3,072

   Competency: Basic Math Concepts

2. Multiply $71.21 by 10.25 yields a value of:
   a. $792.90
   b. $729.90
   c. $722.89
   d. $799.90

   Competency: Basic Math Concepts

3. A weekly payroll register shows that Sarah Barnskey had total wages of $251.25. She had deductions of $21.00 for FICA tax, $32 for federal income tax, and $20 for medical insurance. Compute Sarah's net pay.
   a. $117.08
   b. $178.25
   c. $170.08
   d. $107.08

   Competency: Basic Math Concepts

4. The difference between the subtrahend 34 and the minuend 87 is:
   a. positive 35
   b. positive 53
   c. negative 35
   d. negative 53

   Competency: Basic Math Concepts

5. The product of multiplier .13 and multiplicand 7.0905 is:
   a. .921765
   b. 1.821765
   c. 1.921765
   d. 1.192176

   Competency: Basic Math Concepts

6. The quotient 13 can be achieved with the:
   a. divisor 79 and dividend 6
   b. divisor 6 and dividend 78
   c. divisor 7 and dividend 69
   d. divisor 9 and dividend 77

   Competency: Basic Math Concepts

7. Is 4/4 less than, greater than, equal to, or not equal to1.
   a. not equal
   b. less than
   c. greater than
   d. equal to

   Competency: Basic Math Concepts

8. If the monthly interest rate is 3 percent, what is the APR?
   a. 36 percent
   b. 10 percent
   c. 15 percent
   d. 30 percent

   Competency: Consumer Credit

9. The sales tax is 5.5 percent. Compute the sales tax on $325.
    a. $10.70
    b. $178
    c. $17.88
    d. $1.78

    Competency: Consumer Credit

10. Calculate simple interest on a principal of $1,525 at 19.5 percent at the end of the year.
    a. $29.73
    b. $297.38
    c. $2,973.80
    d. $2,777

    Competency: Consumer Credit

11. The sales tax is 3 percent. Compute the sales tax on $690.
    a. $2.70
    b. $20.70
    c. $270
    d. $207

    Competency: Consumer Credit

12. Joann purchased a used automobile for $1,500. Southwest Banks finances the car for one year at 12.5 percent. Compute the total payment at the end of the year.
    a. $187.50
    b. $1,587.50
    c. $1,887.50
    d. $1,687.50

    Competency: Consumer Credit

13. Find the mode of 0,1,2,2,3,4,4,8,2.
    a. 2.5
    b. 4
    c. 3
    d. 2

    Competency: Consumer Credit

14. The weighted average for the data set.
    Scores 4 9 6 8 1
    Number of occurrences 4 2 6 1 1
    a. 3.93
    b. 2.54
    c. 5
    d. 12

    Competency: Data Analysis and Probability

15. Determine the average of the 2, 5, 7, 10.
    a. 5
    b. 6
    c. 10
    d. 7

    Competency: Data Analysis and Probability

16. Round 4888.262 to the nearest hundredth.
    a. 488
    b. 488.26
    c. 500
    d. 4888.26

    Competency: Decimals

17. Multiply 4.2 x 2.2.
    a. 12
    b. 7.24
    c. 20
    d. 9.24

    Competency: Decimals

18. Mary found an old piggy bank. 4 twenty dollar bills, 7 ones, and 90 pennies were in the piggy bank. How much currency did Mary have?
    a. $89.00
    b. $47.00
    c. $87.90
    d. $80.70

    Competency: Decimals

19. Sue received a 30 percent discount on a blouse retailed for $79.00. What is the sale price of the blouse?
    a. $5.30
    b. $55.30
    c. $59.99
    d. $69.99

    Competency: Discounts

20. Jake's printing gives its customers a series of chain discounts including 15 percent, 5 percent, and 5 percent. Calculate the net selling price on printing orders of $900.
    a. $690.41
    b. $6,600
    c. $69.41
    d. $6,006

    Competency: Discounts

21. Bob received a 10 percent discount on a shirt retailed for $49.99, how much was Bob's discount?
    a. $20.00
    b. $5.00
    c. $30.00
    d. $10.00

    Competency: Discounts

22. Bob received a 10 percent discount on a shirt retailed for $49.99. What is the sale price of the shirt?
    a. $19.99
    b. $29.99
    c. $39.99
    d. $44.99

    Competency: Discounts

23. Subtract 1/4 from 12.
    a. 11
    b. 15
    c. 5
    d. 8 3/4

    Competency: Fractions

24. Divide 1/2 by 1/4.
    a. 6
    b. 2
    c. 8
    d. 4

    Competency: Fractions

25. Convert 1/2 to a decimal.
    a. .5
    b. .50
    c. 10
    d. .20
    Competency: Fractions

26. Convert 14/7 to a whole number.
    a. 2
    b. 20
    c. 7
    d. 14

    Competency: Fractions

27. Dawn made a $10,000 down payment on a home financed at 8 percent. What is the cost of the home?
    a. $85,000
    b. $125,000
    c. $80,000
    d. $8,000

    Competency: Percentages

28. Fourth of July decorations were marked down 20 percent. What is the cost of decorations that originally sold for $100.00.
    a. $20.00
    b. $8.00
    c. $25.00
    d. $80.00

    Competency: Percentages

29. The total sales of Max's Guitar Store were $40,000. Twenty percent comes from the sale of guitar supplies. What amount does Max's Guitar Store collect from guitar supplies?
    a. $80
    b. $8,000
    c. $8,500
    d. $800

    Competency: Percentages

30. Maggie's Coffee Shop makes $2000 in sales from Vanilla Mochas from the total coffee sales of $4000. What percent of Vanilla Mochas are of Maggie's Coffee Shop total sales?
    a. 20 percent
    b. 25 percent
    c. 37 percent
    d. 50 percent

    Competency: Percentages

Business Calculations Answer Key

1)	B	11)	B	21)	D
2)	B	12)	B	22)	B
3)	A	13)	B	23)	B
4)	C	14)	B	24)	D
5)	D	15)	B	25)	C
6)	A	16)	C	26)	D
7)	A	17)	C	27)	D
8)	D	18)	B	28)	D
9)	A	19)	B	29)	C
10)	D	20)	D	30)	A

Business Communication Answer Key

1)	D	11)	A	21)	C
2)	B	12)	D	22)	C
3)	B	13)	D	23)	B
4)	D	14)	A	24)	C
5)	B	15)	A	25)	C
6)	B	16)	B	26)	C
7)	A	17)	B	27)	B
8)	D	18)	A	28)	C
9)	D	19)	B	29)	C
10)	C	20)	B	30)	C

Business Law Answer Key

1)	A	11)	C	21)	C
2)	A	12)	A	22)	A
3)	D	13)	C	23)	A
4)	D	14)	B	24)	C
5)	B	15)	C	25)	C
6)	C	16)	A	26)	B
7)	D	17)	D	27)	A
8)	C	18)	B	28)	D
9)	C	19)	C	29)	D
10)	A	20)	D	30)	D

Business Math Answer Key

1)	B	11)	B	21)	B
2)	B	12)	D	22)	D
3)	B	13)	D	23)	D
4)	B	14)	A	24)	B
5)	A	15)	B	25)	B
6)	B	16)	D	26)	A
7)	D	17)	D	27)	B
8)	A	18)	C	28)	D
9)	C	19)	B	29)	B
10)	B	20)	A	30)	D