INTRODUCTION TO FINANCIAL MATH

Overview
The ability to solve common financial and 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 finance and 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/competitive-event/introduction-to-financial-math/

Website Resources

- 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

INTRODUCTION TO FINANCIAL MATH SAMPLE QUESTIONS

1) During the winter quarter, the student dining service sells an average of 325 portions of hot chocolate per day. The hot chocolate mix comes in containers of 130 oz. each. A serving requires 4 oz. of mix. How many containers are used on an average day?
   A) 6 1/4
   B) 2 1/2
   C) 10
   D) 20

   Competency: Basic Math Concepts

2) Approximate sales are $35,000; approximate costs of goods sold are $6,500; warranty expenses are approximately $3,500; salaries are exactly $15,125; and taxes paid are exactly $1,125. What is the profit?
   A) approximately $15,250
   B) approximately $8,750
   C) exactly $15,250
   D) exactly $8,750

   Competency: Basic Math Concepts

3) To prove that the multiplication is correct, you would:
A) divide the quotient by one of the multipliers
B) multiply the product by one of the multipliers
C) divide the product by one of the multipliers
D) multiply the quotient by one of the multipliers

Competency: Basic Math Concepts

4) What is the inverse operation of division?
A) conversion
B) multiplication
C) subtraction
D) addition

Competency: Basic Math Concepts

5) One-third of two thousand five hundred seventy is approximately:
A) 750
B) 860
C) 800
D) 900

Competency: Basic Math Concepts

6) Area is measured in:
A) square units
B) meters
C) inches
D) miles

Competency: Basic Math Concepts

7) A promissory note is:
A) your written promise to pay back a loan
B) an invoice
C) like a check
D) a gift

Competency: Consumer Credit

8) Andrew bought a car for $2,500 for cash. He expects annual costs to operate the car to be $650 every six months for insurance and $200 per month for upkeep and maintenance. He will get 25 miles per gallon and drive 1,000 miles each month. Gas is $4/gal. What should his total operating expenses be for the first year?
A) $4,970
B) $4,320
C) $1,920
D) $5,620

Competency: Consumer Credit

9) Angela is getting married in a year. She wants to buy her dress with monthly payments of $150 per month for a year. If the total of the finance charges is $400, what is the price of the dress?
A) $2,200
B) $1,650
C) $1,400
D) $1,800

Competency: Consumer Credit

10) Joann purchased a used automobile for $1,500. Southwest Banks finances the car for one year at 12.5%. Compute the total payment at the end of the year.
A) $1,587.50
B) $1,687.50
C) $187.50
D) $1,887.50

Competency: Consumer Credit

11) The installment price on roller blades is $210. With a $50 down payment, what is the monthly payment over a 12-month period?
A) $17.50
B) $14.40
C) $15.52
D) $13.33

Competency: Consumer Credit

12) If the monthly interest rate is .50%, what is the APR?
A) 5%
B) 30%
C) .06%
D) 6%

Competency: Consumer Credit

13) The sum of the daily balance for a 30-day month is $5,325. What is the finance charge if the monthly interest rate is 1.8%?
A) $3.20
B) $15.59
C) $19.59
D) $9.59

Competency: Consumer Credit

14) Given a random distribution of numbers, in order to find the number that has as many other numbers below it as above, you need to determine the:
A) mean
B) median
C) equilibrium
D) mode

Competency: Data Analysis and Probability

15) The weighted average method is useful when the cost of inventory:
A) varies
B) cannot be verified
C) is static
D) is constant

Competency: Data Analysis and Probability

16) Individual data points can best be displayed by using a:
A) scatter diagram
B) pie chart
C) histogram
D) bar chart

Competency: Data Analysis and Probability

17) The best way to depict a future prediction is by using a:
A) histogram
B) bar chart
C) pie chart
D) line chart

Competency: Data Analysis and Probability

18) Depicting data with several categories is done best in a:
A) table
B) line chart
C) pie chart
D) bar chart

Competency: Data Analysis and Probability

19) (12.5 x 2.5) / 1.5 =
A) 20.833
B) 208.33
C) 2.0833
D) 2083.3

Competency: Decimals

20) Which one of the following is **not** a type of discount?
A) trade discount
B) cash discount
C) chain discount
D) credit discount

Competency: Discounts

21) If the regular price for shoes is $84.99 and the markdown is $29.75, what is the percent off?
A) 37 percent
B) 35 percent
C) 25 percent
D) 40 percent

Competency: Discounts

22) Two chairs are shipped from Boston to Los Angeles. Each chair cost $68.00. Terms were 3/10, 2/20, n/30. Shipping was $6.18. What is the total amount due if paid within 10 days?
A) $131.92
B) $138.10
C) $ 84.18
D) $142.18

Competency: Discounts

23) A chair has a list price of $690 and has a trade discount of 30%. What is the cost?
A) $620
B) $483
C) $207
D) $669.30

Competency: Discounts

24) An invoice is for $250 with terms of 10/10, n/30. If immediately paid upon receipt, what is the amount of the check that will be written?
A) $250
B) $275
C) $225
D) $220

Competency: Discounts

25) ¾ X 1/12 X 3/8 X 2/9 =
A) 1/192
B) 8/15
C) 1/3
D) 9/70

Competency: Fractions

26) 9/5 =
A) 1.45
B) 1 4/5
C) 80%
D) 2

Competency: Fractions

27) When mentally dividing by a fraction, the easiest approach is to:
A) convert everything into fractions
B) invert the fraction and multiply
C) convert the fraction to a decimal and divide
D) write down the problem and solve

Competency: Fractions

28) What is 21 percent of $732?
A) $578.28
B) $153.72
C) $286.89
D) $ 15.37

Competency: Percentages

29) Casey answered 71 out of 80 questions correctly. What percent did he answer incorrectly?
A) 89 percent
B) 15 percent
C) 11 percent
D) 85 percent

Competency: Percentages

30) To find the markup, you would:
A) divide the selling price by the cost
B) subtract the selling price from the cost
C) add the cost and the selling price
D) subtract the cost from the selling price

Competency: Percentages