

### DESCRIPTION

Individual Jobs for Montana's Graduates (JMG) students will demonstrate commitment to the JMG program and his or her Montana Career Association (MCA) by completing a written math test using basic problem solving and addition, subtraction, multiplication, and division comprehension.

### PURPOSE

Provide JMG students an opportunity to showcase their understanding of basic math competency.

### KEY LEARNING OBJECTIVES

The key learning objectives for students participating in this event are:

- Demonstrate a basic understanding of multiplication, division, addition, and subtraction
- Learn to use and implement mathematic equations
- Increase likelihood of success in society by practicing basic life math skills

### ELIGIBILITY

JMG students in grades 9 and 10, currently enrolled in the MCA, with up-to-date Jobs for America's Graduates eNDMS roster as verified by JMG state staff.

### ENTRIES

A maximum of two entries per grades (9 & 10), for a total of four possible entries per chapter.

### OBSERVERS

Observers are not allowed for this competitive event

### COMPETITIVE EVENT TIMELINE

- The Life Math Skills event begins at 10:00 AM and ends at 11:00 AM on Day 1 of IGNITE.

Each competitor will adhere to the following timeline:

INSTRUCTIONS	10 MINUTES
TESTING	50 MINUTES

### EVENT RULES

1. The competitor will report directly to the Life Math Skills competition room at the scheduled event time.
2. The competitive event coordinator will provide competitors pencils and scratch paper, along with the test. Calculators will not be permitted.
3. The competitive event coordinator will provide an orientation with a brief explanation of instructions, answer any questions, and then the test will begin. Once the test begins, the event coordinator cannot answer any questions, except for word pronunciation.
4. Competitors will have 50 minutes to complete the test. Time warnings will be given at the halfway mark and when 5 minutes remain.
5. No competitors will be admitted once the test has been handed out; competitors will not be allowed to leave and return to the Life Math Skills competition room.
6. Competitors will complete the test and hand the test with answer sheet back to the competitive event coordinator.
7. Once all of the tests have been handed in, the competitive event coordinator will provide the scoring committee chairperson all of the answer sheets.
8. Judges' decisions are final.

### Life Math Skills Practice Test

#### Instructions

- Put any decimal points in their proper place.
- For money problems, round to the nearest penny and include the dollar sign on your answer sheet.
- DO NOT WRITE ON THE TEST.** Record all answers on the answer sheet provided. Use scratch paper to calculate your answers.

1) 
$$\begin{array}{r} 370 \\ +608 \\ \hline +894 \end{array}$$

2) 
$$\begin{array}{r} 985 \\ + 12 \\ +568 \\ +649 \\ \hline +259 \end{array}$$

3) 
$$\begin{array}{l} \$37.50 + \$281.25 + \\ \$1,256.25 + \$1.25 = \end{array}$$

4)  $7000 - 5409 =$

5) 
$$\begin{array}{r} \$338.34 \\ - \$157.86 \\ \hline \end{array}$$

6) 
$$\begin{array}{r} \$45.81 \\ \times 5 \\ \hline \end{array}$$

7)  $\$16.87 \times 32 =$

8) 
$$\begin{array}{r} \$56.84 \\ \times 35\% \\ \hline \end{array}$$

9)  $0.17 \times 6389 =$

10)  $\$234.30 / 6 =$

The local department store is having a clearance sale. Determine the sale price of each of the following items:

11) BEACH TOWELS  
ORIGINAL COST = \$ 14.99  
25% OFF = \_\_\_\_\_

12) BLUE JEANS  
ORIGINAL COST = \$ 39.99  
33 % OFF = \_\_\_\_\_

13) SET OF COOKWARE  
ORIGINAL COST = \$59.50  
1/2 OFF = \_\_\_\_\_

14) STUFFED ANIMAL  
ORIGINAL COST = \$11.75  
1/3 OFF = \_\_\_\_\_

- 15) Jennifer earned \$460.00 for a two-week pay period. Her employer deducted \$35.19 for FICA, \$39.10 for State Income Tax, and \$69.00 for Federal Income Tax. What is Jennifer's net pay?

## *for* LIFE MATH SKILLS

- 16) As an employee of a department store, Laura gets a 25% discount on everything she purchases there. She wants to buy some presents for her family. The items are regularly marked as follows: one shirt @ \$16.60; one travel kit @ \$20.79; two ties at \$9.99 each; and one dress at \$45.00. What is the total cost of the merchandise to Laura?
- 17) The map has a scale of 2 inches, which represents 30 miles. Tucson and Flagstaff are 19 inches apart on the map. How far apart are they in miles?
- 18) Mark is a warehouse worker at a variety store. He earns a yearly salary of \$19,032. How much does he earn each week (52 weeks)? How much does he earn per hour, based on a 40-hour workweek?
- 19) Roberto's truck holds 14.5 gallons of gas. Assuming his tank is empty, how much will it cost him to fill up if gas costs \$2.28 per gallon?
- 20) The Montana Career Association is having a fundraiser. They are selling candy sticks that cost \$4.80 for a box of 80. If they sell each candy stick for 15 cents, how many full boxes must they purchase in order to raise at least \$450.00 profit?
- 21) Michael works as a package assembler at a plant. He started working at \$8.50 per hour. After completing a three-month training period, he received a 30 cent per hour raise. Since then, he has earned pay increases of 50 cents per hour every three months. After one full year of employment, how much is Dave earning per hour?
- 22) Rose earns 7% commission on all her sales in the hosiery department as well as hourly wage of \$8.15. Monday she worked 7 hours and sold \$110.00 worth of hosiery. Tuesday she worked 8 hours and sold \$151.00 worth of hosiery. Friday she worked 6 hours and sold \$130.00 worth. Saturday she worked 8 hours and sold \$205.00 worth. How much did she earn that week?
- 23) Sandy earns \$8.25 per hour and 1 1/2 times that rate for any overtime after 40 hours. Monday she worked 9 hours, Tuesday, 8 hours; Wednesday, 9 hours; Thursday, 10 hours; and Friday, 10 hours. How much did she earn this week?

### LIFE MATH SKILLS PRACTICE TEST ANSWER SHEET

<b>SCHOOL NAME</b>				
<b>STUDENT NAME</b>				
<b>STUDENT GRADE</b>	<input type="checkbox"/> 9 <sup>th</sup> Grade	<input type="checkbox"/> 10 <sup>th</sup> Grade	<input type="checkbox"/> 11 <sup>th</sup> Grade	<input type="checkbox"/> 12 <sup>th</sup> Grade

*Only put your final answers on this sheet. Use the provided scratch paper for calculations.*

1)	13)
2)	14)
3)	15)
4)	16)
5)	17)
6)	18 a)
7)	18 b)
8)	19)
9)	20)
10)	21)
11)	22)
12)	23)

### LIFE MATH SKILLS PRACTICE TEST ANSWER KEY

1) 1872	13) \$29.75
2) 2473	14) \$7.83
3) \$1,576.25	15) \$316.71
4) 1591	16) \$76.78
5) \$180.48	17) 285
6) \$229.05	18 a) \$366.00
7) \$539.84	18 b) \$9.15
8) \$19.89	19) \$33.06
9) 1086.13	20) 63 boxes
10) \$39.05	21) \$10.30
11) \$11.24	22) \$278.07
12) \$26.79	23) \$404.25