

## Mathematics Screening Test Packet Directions and Recommendations to the Evaluator

### Directions:

1. There are three different forms of the math screen available: Forms A, B, and C. Copy the test to be used and distribute to the individual. If more than one person is taking the test, it is advisable to distribute different forms to ensure that each person works independently.
2. The directions on the test indicate that each answer should be placed in the blank at the left of the question.
3. Please remind each person taking the test that the use of a calculator is recommended and that each answer on the test should be an exact answer. Do not round off any answer. There is no answer that results in more than two decimal places. For example, if the calculator shows 62.36, give this answer. Do not round off to 62 or 62.4.
4. The time limitation should be 45 minutes. The test is designed so that each person will have sufficient time to work on each question and finish within the 45-minute period.
5. The *Verification of Completion of Math Screen* is the form used to verify that an individual has successfully completed the exam. Please copy and complete one form for each individual after their exam has been scored and submit as verification. Keep the original test and a copy of the verification form for your records.

### Arriving at the Test Score:

A perfect score on the test is 100 points. Each person taking the test will receive an automatic 10 points. To arrive at a test score for an individual, subtract 5 points for each incorrect answer from 100. Use this formula:

$$\text{Test Score} = 100 - [ 5 \times \underline{\text{the number of incorrect answers}} ]$$

You will find a guide to assist you with this calculation at the bottom of Page 2 on each test.

### Recommendations:

1. If an individual has a test score of **70 or better**, then this individual should be able to succeed in working with the mathematics content of a Food Service Manager's Training Program.
2. If an individual has a test score of **50 or 69**, then administrative discretion could be used, considering other skills and/or abilities of the person.
3. If an individual scores in the **31 – 49** range, this individual should attend a remedial mathematics class and be retested in order to pursue a position as a Food Service Manager.
4. If an individual has a test score of **30 or below**, this is a strong indication of mathematical deficiency. It seems that this individual would have great difficulty performing the mathematical requirements of a Food Service Manager.

MATHEMATICS SCREENING TEST

**Form A**

Test Directions: Place your answer in the blank to the left of the question. Give exact answers. Do not round off. (Reminder: 16 oz = 1 lb. and 16 cups = 1 gallon)

- \$ \_\_\_\_\_ 1. 37% of \$214.00 is ?
- \$ \_\_\_\_\_ 2.  $138 \times \$1.25 = ?$
- \_\_\_\_\_ 3. How many  $\frac{1}{4}$ -cup servings are in 8 cups?
- \_\_\_\_\_ 4. How many cups are in  $3 \frac{1}{4}$  gallons?
- \_\_\_\_\_ 5.  $\frac{3}{8} \div \frac{1}{4} = ?$
- \_\_\_\_\_ 6.  $1 \frac{1}{4}$  cups +  $\frac{1}{4}$  cup +  $2 \frac{1}{2}$  cups = ? cups
- \_\_\_\_\_ 7. A common denominator for the fractions  $\frac{1}{2}$ ,  $\frac{3}{8}$ , and  $\frac{3}{4}$  is ?
- \$ \_\_\_\_\_ 8.  $\$25.75 + \$42.65 + \$71.35 =$
- \_\_\_\_\_ 9. Write the fraction  $\frac{1}{2}$  as a decimal.
- \_\_\_\_\_ 10. How many ounces are in  $5 \frac{1}{2}$  pounds?
- \_\_\_\_\_ 11.  $(\frac{250}{100}) \times 9.3 = ?$
- \$ \_\_\_\_\_ 12. If 27 adult lunch tickets are sold at \$1.25 each and 134 student lunch tickets are sold at \$.75 each, what is the total amount of money collected?
- \_\_\_\_\_ 13. If 6 pounds of mixed frozen vegetables are required to serve 50 people, how many pounds are needed to serve 350 people?
- \_\_\_\_\_ 14. 18 pounds of cooked lean ground beef are called for in a recipe for 100 servings of spaghetti sauce. How many pounds of cooked lean ground beef are needed for 250 servings?
- \_\_\_\_\_ 15. A number 10 scoop has an approximate capacity of 4 ounces. How many individual salads can be made from 8 pounds of tuna salad if one number 10 scoop is used for each salad?

- \$ \_\_\_\_\_ 16. If a 5-pound box of frozen peas costs \$3.00 and has a yield of 50  $\frac{1}{4}$ -cup servings, what is the cost of each  $\frac{1}{4}$ -cup serving?
- \_\_\_\_\_ 17. A  $\frac{1}{4}$ -cup serving (use  $\frac{1}{4}$ -cup as approximately 2 ounces) of carrot slices is given to each of 180 children. If a box of carrot slices weighs  $2\frac{1}{2}$  pounds, how many boxes will be used?
- \_\_\_\_\_ 18. A K-12 school gives 68 students in grades K-2 a  $\frac{1}{2}$ -cup serving of apple juice, 64 students in grades 3-6 a  $\frac{3}{4}$ -cup serving of apple juice, and 46 students in grades 7-12 a 1 cup serving of apple juice. How many gallons of apple juice are used?

**For Evaluator Use:**

Number incorrect answers \_\_\_\_\_ x 5 = \_\_\_\_\_ Part A      Test Score = 100 - ( \_\_\_\_\_ ) = \_\_\_\_\_ from Part A

MATHEMATICS SCREENING TEST—Answer Key

**Form A**

Test Directions: Place your answer in the blank to the left of the question. Give exact answers. Do not round off. (Reminder: 16 oz = 1 lb. and 16 cups = 1 gallon)

- |  |  |
|--|--|
| \$ 79.18<br>_____                      | 1. 37% of \$214.00 is ?  |
| \$ 172.50<br>_____                     | 2. $138 \times \$1.25 = ?$   |
| <u>32</u>                              | 3. How many $\frac{1}{4}$ -cup servings are in 8 cups?   |
| <u>52</u>                              | 4. How many cups are in $3\frac{1}{4}$ gallons?  |
| <u>1.5 or <math>\frac{3}{2}</math></u> | 5. $\frac{3}{8} \div \frac{1}{4} = ?$  |
| <u>4</u>                               | 6. $1\frac{1}{4}$ cups + $\frac{1}{4}$ cup + $2\frac{1}{2}$ cups = ? cups  |
| <u>8</u>                               | 7. A common denominator for the fractions $\frac{1}{2}$ , $\frac{3}{8}$ , and $\frac{3}{4}$ is ?   |
| \$ <u>139.75</u>                       | 8. $\$25.75 + \$42.65 + \$71.35 =$   |
| <u>0.5</u>                             | 9. Write the fraction $\frac{1}{2}$ as a decimal.  |
| <u>88</u>                              | 10. How many ounces are in $5\frac{1}{2}$ pounds?  |
| <u>23.25</u>                           | 11. $(\frac{250}{100}) \times 9.3 =$   |
| \$ <u>134.25</u>                       | 12. If 27 adult lunch tickets are sold at \$1.25 each and 134 student lunch tickets are sold at \$.75 each, what is the total amount of money collected?                         |
| <u>42</u>                              | 13. If 6 pounds of mixed frozen vegetables are required to serve 50 people, how many pounds are needed to serve 350 people?  |
| <u>45</u>                              | 14. 18 pounds of cooked lean ground beef are called for in a recipe for 100 servings of spaghetti sauce. How many pounds of cooked lean ground beef are needed for 250 servings? |
| <u>32</u>                              | 15. A number 10 scoop has an approximate capacity of 4 ounces. How many individual salads can be made from 8 pounds of tuna salad if one number 10 scoop is used for each salad? |

- \$  
.06 or 6¢
16. If a 5-pound box of frozen peas costs \$3.00 and has a yield of 50  $\frac{1}{4}$ -cup servings, what is the cost of each  $\frac{1}{4}$ -cup serving?
- ~~9 boxes~~
17. A  $\frac{1}{4}$ -cup serving (use  $\frac{1}{4}$ -cup as approximately 2 ounces) of carrot slices is given to each of 180 children. If a box of carrot slices weighs 2  $\frac{1}{2}$  pounds, how many boxes will be used?
- 8 gallons
18. A K-12 school gives 68 students in grades K-2 a  $\frac{1}{2}$ -cup serving of apple juice, 64 students in grades 3-6 a  $\frac{3}{4}$ -cup serving of apple juice, and 46 students in grades 7-12 a 1 cup serving of apple juice. How many gallons of apple juice are used?

MATHEMATICS SCREENING TEST

**Form B**

Test Directions: Place your answer in the blank to the left of the question. Give exact answers. Do not round off. (Reminder: 16 oz = 1 lb. and 16 cups = 1 gallon)

- \$ \_\_\_\_\_ 1. 34% of \$316.00 is ?
- \$ \_\_\_\_\_ 2.  $143 \times \$1.25 = ?$
- \_\_\_\_\_ 3. How many  $\frac{1}{4}$ -cup servings are in 10 cups?
- \_\_\_\_\_ 4. How many cups are in  $4 \frac{1}{4}$  gallons?
- \_\_\_\_\_ 5.  $\frac{3}{8} \div \frac{1}{4} = ?$
- \_\_\_\_\_ 6.  $2 \frac{1}{4}$  cups +  $\frac{1}{4}$  cup +  $1 \frac{1}{2}$  cups = ? cups
- \_\_\_\_\_ 7. A common denominator for the fractions  $\frac{3}{2}$ ,  $\frac{1}{8}$ , and  $\frac{1}{4}$  is ?
- \$ \_\_\_\_\_ 8.  $\$41.65 + \$27.75 + \$68.35 =$
- \_\_\_\_\_ 9. Write the fraction  $\frac{1}{4}$  as a decimal.
- \_\_\_\_\_ 10. How many ounces are in  $4 \frac{1}{2}$  pounds?
- \_\_\_\_\_ 11.  $(\frac{250}{100}) \times 10.7 = ?$
- \$ \_\_\_\_\_ 12. If 37 adult lunch tickets are sold at \$1.25 each and 126 student lunch tickets are sold at \$.75 each, what is the total amount of money collected?
- \_\_\_\_\_ 13. If 7 pounds of mixed frozen vegetables are required to serve 50 people, how many pounds are needed to serve 350 people?
- \_\_\_\_\_ 14. 20 pounds of cooked lean ground beef are called for in a recipe for 100 servings of spaghetti sauce. How many pounds of cooked lean ground beef are needed for 250 servings?
- \_\_\_\_\_ 15. A number 10 scoop has an approximate capacity of 4 ounces. How many individual salads can be made from 10 pounds of tuna salad if one number 10 scoop is used for each salad?

- \$ \_\_\_\_\_ 16. If a 5-pound box of frozen peas costs \$3.50 and has a yield of 50  $\frac{1}{4}$ -cup servings, what is the cost of each  $\frac{1}{4}$ -cup serving?
- \_\_\_\_\_ 17. A  $\frac{1}{4}$ -cup serving (use  $\frac{1}{4}$ -cup as approximately 2 ounces) of carrot slices is given to each of 360 children. If a box of carrot slices weighs  $2\frac{1}{2}$  pounds, how many boxes will be used?
- \_\_\_\_\_ 18. A K-12 school gives 68 students in grades K-2 a  $\frac{1}{2}$ -cup serving of apple juice, 64 students in grades 3-6 a  $\frac{3}{4}$ -cup serving of apple juice, and 46 students in grades 7-12 a 1 cup serving of apple juice. How many gallons of apple juice are used?

**For Evaluator Use:**

Number incorrect answers \_\_\_\_\_ x 5 = \_\_\_\_\_  
Part A

Test Score =  $100 - \left(\frac{\text{_____}}{\text{A}}\right) =$   
\_\_\_\_\_ from Part A

MATHEMATICS SCREENING TEST Answer Key

**Form B**

Test Directions: Place your answer in the blank to the left of the question. Give exact answers. Do not round off. (Reminder: 16 oz = 1 lb. and 16 cups = 1 gallon)

- |  |   |
|--|---|
| \$ <u>107.44</u>                       | 1. 34% of \$316.00 is ?   |
| \$ <u>178.75</u>                       | 2. $143 \times \$1.25 = ?$  |
| <u>40</u>                              | 3. How many $\frac{1}{4}$ -cup servings are in 10 cups?   |
| <u>68</u>                              | 4. How many cups are in $4 \frac{1}{4}$ gallons?  |
| <u>1.5 or <math>\frac{3}{2}</math></u> | 5. $\frac{3}{8} \div \frac{1}{4} = ?$   |
| <u>4</u>                               | 6. $2 \frac{1}{4}$ cups + $\frac{1}{4}$ cup + $1 \frac{1}{2}$ cups = ? cups   |
| <u>8</u>                               | 7. A common denominator for the fractions $\frac{3}{2}$ , $\frac{1}{8}$ , and $\frac{1}{4}$ is ?  |
| \$ <u>137.75</u>                       | 8. $\$41.65 + \$27.75 + \$68.35 = ?$  |
| <u>0.25</u>                            | 9. Write the fraction $\frac{1}{4}$ as a decimal.   |
| <u>72</u>                              | 10. How many ounces are in $4 \frac{1}{2}$ pounds?  |
| <u>26.75</u>                           | 11. $(\frac{250}{100}) \times 10.7 =$   |
| \$ <u>140.75</u>                       | 12. If 37 adult lunch tickets are sold at \$1.25 each and 126 student lunch tickets are sold at \$.75 each, what is the total amount of money collected?                          |
| <u>49</u>                              | 13. If 7 pounds of mixed frozen vegetables are required to serve 50 people, how many pounds are needed to serve 350 people?   |
| <u>50</u>                              | 14. 20 pounds of cooked lean ground beef are called for in a recipe for 100 servings of spaghetti sauce. How many pounds of cooked lean ground beef are needed for 250 servings?  |
| <u>40</u>                              | 15. A number 10 scoop has an approximate capacity of 4 ounces. How many individual salads can be made from 10 pounds of tuna salad if one number 10 scoop is used for each salad? |



- \$  
.07 or 7¢
16. If a 5-pound box of frozen peas costs \$3.00 and has a yield of 50  $\frac{1}{4}$ -cup servings, what is the cost of each  $\frac{1}{4}$ -cup serving?
- ~~18 boxes~~
17. A  $\frac{1}{4}$ -cup serving (use  $\frac{1}{4}$ -cup as approximately 2 ounces) of carrot slices is given to each of 360 children. If a box of carrot slices weighs 2  $\frac{1}{2}$  pounds, how many boxes will be used?
- 8 gallons
18. A K-12 school gives 68 students in grades K-2 a  $\frac{1}{2}$ -cup serving of apple juice, 64 students in grades 3-6 a  $\frac{3}{4}$ -cup serving of apple juice, and 46 students in grades 7-12 a 1 cup serving of apple juice. How many gallons of apple juice are used?

MATHEMATICS SCREENING TEST

**Form C**

Test Directions: Place your answer in the blank to the left of the question. Give exact answers. Do not round off. (Reminder: 16 oz = 1 lb. and 16 cups = 1 gallon)

- \$ \_\_\_\_\_ 1. 24% of \$216.00 is ?
- \$ \_\_\_\_\_ 2.  $123 \times \$1.25 = ?$
- \_\_\_\_\_ 3. How many  $\frac{1}{4}$ -cup servings are in 6 cups?
- \_\_\_\_\_ 4. How many cups are in  $4 \frac{1}{4}$  gallons?
- \_\_\_\_\_ 5.  $\frac{3}{8} \div \frac{1}{4} = ?$
- \_\_\_\_\_ 6.  $2 \frac{1}{4}$  cups +  $1 \frac{1}{4}$  cup +  $2 \frac{1}{2}$  cups = ? cups
- \_\_\_\_\_ 7. A common denominator for the fractions  $\frac{1}{2}$ ,  $\frac{3}{8}$ , and  $\frac{1}{4}$  is ?
- \$ \_\_\_\_\_ 8.  $\$44.85 + \$22.75 + \$61.25 = ?$
- \_\_\_\_\_ 9. Write the fraction  $\frac{1}{2}$  as a decimal.
- \_\_\_\_\_ 10. How many ounces are in  $3 \frac{1}{2}$  pounds?
- \_\_\_\_\_ 11.  $(\frac{250}{100}) \times 10.3 =$
- \$ \_\_\_\_\_ 12. If 27 adult lunch tickets are sold at \$1.25 each and 116 student lunch tickets are sold at \$.75 each, what is the total amount of money collected?
- \_\_\_\_\_ 13. If 8 pounds of mixed frozen vegetables are required to serve 50 people, how many pounds are needed to serve 350 people?
- \_\_\_\_\_ 14. 16 pounds of cooked lean ground beef are called for in a recipe for 100 servings of spaghetti sauce. How many pounds of cooked lean ground beef are needed for 250 servings?
- \_\_\_\_\_ 15. A number 10 scoop has an approximate capacity of 4 ounces. How many individual salads can be made from 6 pounds of tuna salad if one number 10 scoop is used for each salad?

- \$ \_\_\_\_\_ 16. If a 5-pound box of frozen peas costs \$2.50 and has a yield of 50  $\frac{1}{4}$ -cup servings, what is the cost of each  $\frac{1}{4}$ -cup serving?
- \_\_\_\_\_ 17. A  $\frac{1}{4}$ -cup serving (use  $\frac{1}{4}$ -cup as approximately 2 ounces) of carrot slices is given to each of 200 children. If a box of carrot slices weighs  $2\frac{1}{2}$  pounds, how many boxes will be used?
- \_\_\_\_\_ 18. A K-12 school gives 68 students in grades K-2 a  $\frac{1}{2}$ -cup serving of apple juice, 64 students in grades 3-6 a  $\frac{3}{4}$ -cup serving of apple juice, and 46 students in grades 7-12 a 1 cup serving of apple juice. How many gallons of apple juice are used?

**For Evaluator Use:**

Number incorrect answers \_\_\_\_\_ x 5 =  $\frac{\text{_____}}{\text{Part A}}$

Test Score =  $100 - \left(\frac{\text{_____}}{\text{A}}\right) =$   
 $\frac{\text{_____}}{\text{A}}$  from Part

MATHEMATICS SCREENING TEST Answer Key

**Form C**

Test Directions: Place your answer in the blank to the left of the question. Give exact answers. Do not round off. (Reminder: 16 oz = 1 lb. and 16 cups = 1 gallon)

- |                               |  |
|-------------------------------|--|
| \$ 51.84<br>_____             | 1. 24% of \$216.00 is ?  |
| \$ 153.75<br>_____            | 2. $123 \times \$1.25 = ?$   |
| 24<br>_____                   | 3. How many $\frac{1}{4}$ -cup servings are in 6 cups?   |
| 68<br>_____                   | 4. How many cups are in $4 \frac{1}{4}$ gallons?   |
| $\frac{3}{2}$ or 1.5<br>_____ | 5. $\frac{3}{8} \div \frac{1}{4} = ?$  |
| 6<br>_____                    | 6. $2 \frac{1}{4}$ cups + $1 \frac{1}{4}$ cup + $2 \frac{1}{2}$ cups = ? cups  |
| 8<br>_____                    | 7. A common denominator for the fractions $\frac{1}{2}$ , $\frac{3}{8}$ , and $\frac{1}{4}$ is ?   |
| \$ 128.85<br>_____            | 8. $\$44.85 + \$22.75 + \$61.25 = ?$   |
| 0.5<br>_____                  | 9. Write the fraction $\frac{1}{2}$ as a decimal.  |
| 56<br>_____                   | 10. How many ounces are in $3 \frac{1}{2}$ pounds?   |
| 25.75<br>_____                | 11. $(\frac{250}{100}) \times 10.3 =$  |
| \$ 120.75<br>_____            | 12. If 27 adult lunch tickets are sold at \$1.25 each and 116 student lunch tickets are sold at \$.75 each, what is the total amount of money collected?                         |
| 56<br>_____                   | 13. If 8 pounds of mixed frozen vegetables are required to serve 50 people, how many pounds are needed to serve 350 people?  |
| 40<br>_____                   | 14. 16 pounds of cooked lean ground beef are called for in a recipe for 100 servings of spaghetti sauce. How many pounds of cooked lean ground beef are needed for 250 servings? |
| 24<br>_____                   | 15. A number 10 scoop has an approximate capacity of 4 ounces. How many individual salads can be made from 6 pounds of tuna salad if one number 10 scoop is used for each salad? |

- \$  
.05 or 5¢
16. If a 5-pound box of frozen peas costs \$2.50 and has a yield of 50  $\frac{1}{4}$ -cup servings, what is the cost of each  $\frac{1}{4}$ -cup serving?
- 10 boxes
17. A  $\frac{1}{4}$ -cup serving (use  $\frac{1}{4}$ -cup as approximately 2 ounces) of carrot slices is given to each of 200 children. If a box of carrot slices weighs  $2\frac{1}{2}$  pounds, how many boxes will be used?
- 8 gallons
18. A K-12 school gives 68 students in grades K-2 a  $\frac{1}{2}$ -cup serving of apple juice, 64 students in grades 3-6 a  $\frac{3}{4}$ -cup serving of apple juice, and 46 students in grades 7-12 a 1 cup serving of apple juice. How many gallons of apple juice are used?

**Verification of Completion of Math Screen**  
*(Complete and submit this form only)*

**This verifies that** \_\_\_\_\_  
Name of Individual

**has made a score of 70 or higher on the math screen for Program Managers.**

\_\_\_\_\_  
Signature of Math Screening Test Evaluator

\_\_\_\_\_  
Name and Address of School District

\_\_\_\_\_  
Date