

Level A - Form 1 - Applied Mathematics: Computation in Context

Sample Question

How much change will you get if you spend \$2.49 and pay with a \$5.00 bill?

- A \$1.51
- B \$1.61
- C \$2.51
- D \$2.61

Level A - Form 1 - Applied Mathematics: Computation in Context

The sign shows sale markdowns at a music store. Study the sign. Then do Numbers 1 through 4.



- A CD that is originally priced at \$15.85 is red-tagged for the sale. What is the sale price of the CD?
 - \$9.51
 - \$6.34
 - \$7.93
 - \$9.85
- The Music Market tagged 576 CDs for the sale. Of those, $\frac{1}{4}$ were red-tagged. Of the red-tagged CDs, $\frac{1}{3}$ were two disc sets. How many 2 disc sets were red-tagged?
 - 192
 - 144
 - 48
 - 82
- The total sales on Saturday were 1.5 times the total sales on Friday. Sales on Friday totaled \$1,862.00. If the average price for a CD was \$9.50, how many CDs were sold on Saturday?
 - 2,793
 - 294
 - 196
 - 1,241
- Of the 24 employees at Music Market, $\frac{1}{3}$ are full-time employees. Of the part-time employees, $\frac{1}{2}$ are college students. How many college students are part-time employees at Music Market?
 - 8
 - 16
 - 4
 - 12
- Patty earns a raise of 4% each year. If her starting salary is \$24,812.00, what will be her salary after one year?
 - \$25,804.48
 - \$26,836.66
 - \$34,736.80
 - \$31,015.00

The recipe explains how to make Mexican wedding cake cookies. Study the recipe. Then do Numbers 6 through 9.

Mexican Wedding Cake Cookies

$1\frac{1}{3}$ cup shortening $\frac{1}{8}$ teaspoon salt
 $\frac{2}{3}$ cup confectioners' sugar 1 cup finely chopped pecans
 $\frac{1}{2}$ teaspoon vanilla
 $2\frac{1}{4}$ cups all-purpose flour Extra confectioners' sugar

In large mixing bowl cream shortening, sugar, and vanilla until light and fluffy. Add flour, salt, and pecans. Mix well. Cover and refrigerate for at least 2 hours. Preheat oven to 325°F. Shape dough into 1- to $1\frac{1}{2}$ -inch balls.

Place 2 inches apart on ungreased baking sheet. Bake for about 25 minutes. Roll warm cookies in confectioners' sugar. Remove to cooling rack.

Makes $2\frac{1}{2}$ to $3\frac{1}{2}$ dozen cookies.

6. Javier wants to make two batches of the cookies. How much flour will he need?
- F $2\frac{1}{4}$ cups
G $4\frac{1}{4}$ cups
H $4\frac{1}{2}$ cups
J $2\frac{3}{4}$ cups
7. How many cookies does this recipe make?
- A 30 to 42
B 26 to 38
C 12 to 24
D 60 to 84

8. Pamela baked a total of 130 cookies. She kept 20% for her family and took the remaining cookies to a bake sale. How many cookies did she take to the bake sale?
- F 80
G 26
H 110
J 104
9. If you wanted to make a half batch of these cookies, how much shortening would you need?
- A $\frac{1}{6}$ cup
B $\frac{1}{2}$ cup
C $\frac{3}{8}$ cup
D $\frac{2}{3}$ cup

10. A small air purifier can be used to filter the air in a room that is 110 square feet. A medium air purifier can cover an area that is 1.8 times that covered by a small purifier. A large air purifier can cover an area that is 2.75 times that covered by the small purifier. For which range of room sizes is it best to purchase the large air purifier?
- F less than 110 square feet
 - G 110 to 198 square feet
 - H 198 to 303 square feet
 - J greater than 303 square feet
11. A plumber charges \$25.00 for an initial visit and then \$32.00 an hour for labor. If the plumber works 5.25 hours on a job, how much does he earn?
- A \$131.25
 - B \$168.00
 - C \$193.00
 - D \$163.25

The advertisement shows the sale that Murphy's Department Store is having. Study the ad. Then do Numbers 12 through 15.

Murphy's Department Store

Sale Items

Solid color T-shirts	\$8.75
Khaki cargo pants	\$24.50
Sterling silver earrings	\$6.25 a pair
All sneakers	20% off
All patio furniture	35% off

<p>Senior Citizen Day Every Wednesday Senior citizens receive an additional 10% off all items.</p>	<p>Additional Savings 40% Off any one item <small>Limit one coupon per customer</small></p>
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12. On Wednesday, Betty, a senior citizen, bought a pair of earrings and 3 T-shirts at Murphy's department store. She used the coupon. What was Betty's final bill?
- F \$32.50
 - G \$23.62
 - H \$26.10
 - J \$26.25

13. Mrs. Fenstameyer bought a T-shirt and a pair of khaki pants for each of her 3 children and bought a pair of earrings for herself. She forgot to use the additional savings coupon. How much did she spend altogether?
- A \$99.75
 - B \$106.00
 - C \$93.50
 - D \$118.50
14. Zack purchased a patio set that was originally \$359.00 but was on sale for 35% off. He also used the coupon to get an additional amount off the sale price. What is the total amount he saved on the patio set?
- F \$140.01
 - G \$193.86
 - H \$269.25
 - J \$218.99
15. Randy purchased a tent for \$56.45, camping accessories for \$10.18, and a fishing pole for \$30.89. He handed the clerk \$100.00. How much change should he receive?
- A \$2.48
 - B \$3.48
 - C \$2.58
 - D \$3.58

16. A town census revealed that of its 75,200 residents, about $\frac{3}{5}$ are between the ages of 20 and 40. Of the residents, about $\frac{2}{5}$ are married. About how many married residents are between the ages 20 and 40?
- F 18,048
 - G 30,080
 - H 45,120
 - J 15,040
17. Due to gravity differences, your weight on Mars would be 0.38 times your weight on Earth. If you weighed 146 pounds on Earth, what would be your weight on Mars?
- A 108 pounds
 - B 55.48 pounds
 - C 384.21 pounds
 - D 184 pounds
18. A news article stated that it rained 128 days last year. About what percent of the year did it rain?
- F 28.5%
 - G 35%
 - H 65%
 - J 71.5%
19. Two co-workers went to lunch. The bill was \$42.80. They left a 15% tip. If the bill, including the tip, is divided evenly between the co-workers, how much did each person pay?
- A \$24.61
 - B \$49.22
 - C \$21.40
 - D \$18.19
20. On a test, a student answered $\frac{4}{5}$ of the questions correctly. If the student answered 64 questions correctly, how many questions were on the test?
- F 75
 - G 80
 - H 60
 - J 68