

NAME _____ CLASS _____

Math !!!

- 1- You are working at a convenience store. A customer buys \$5.83 worth of goods and gives you a twenty dollar bill. How much change do you give the customer?

- 2- Your car has a 24 gallon gas tank. The gas gauge says $\frac{1}{4}$ full.
How many gallons will fill the tank? _____
If gas costs \$3.70/ gallon how much will it cost to fill up the tank? _____
(hint: just the cost of the additional gas)
- 3- A cookie recipe calls for $\frac{3}{4}$ cup of sugar. How much sugar do you need if you make $\frac{1}{2}$ a recipe? _____
- 4- A piece of plywood is four feet by eight feet. How many two foot by two foot pieces can you get out of the sheet? _____ If you paid \$16.00 for the sheet how much did each two foot by two foot piece cost? _____
(hint: a sheet of plywood is a piece of plywood)
- 5- $\frac{1}{4}$ = _____ % $\frac{3}{4}$ = _____ %
- 6- $7 \times 7 =$ _____ $8 \times 6 =$ _____ $9 \times 3 =$ _____
- 7- A box is four feet by four feet by four feet. How many square feet is one side? _____ How many cubic feet is the box? _____
- 8- A triangle is 6' X 6'. How many square feet is the triangle? _____
- 9- $1,897 - 428 =$ _____
- 10- 927 divided by 3 = _____

CVCC MATH ASSESSMENT

YEAR GIVEN	AVERAGE SCORE
2013	50%
2014	57%
2015	46%

Practical Problems in Mathematics
for EMERGENCY SERVICES

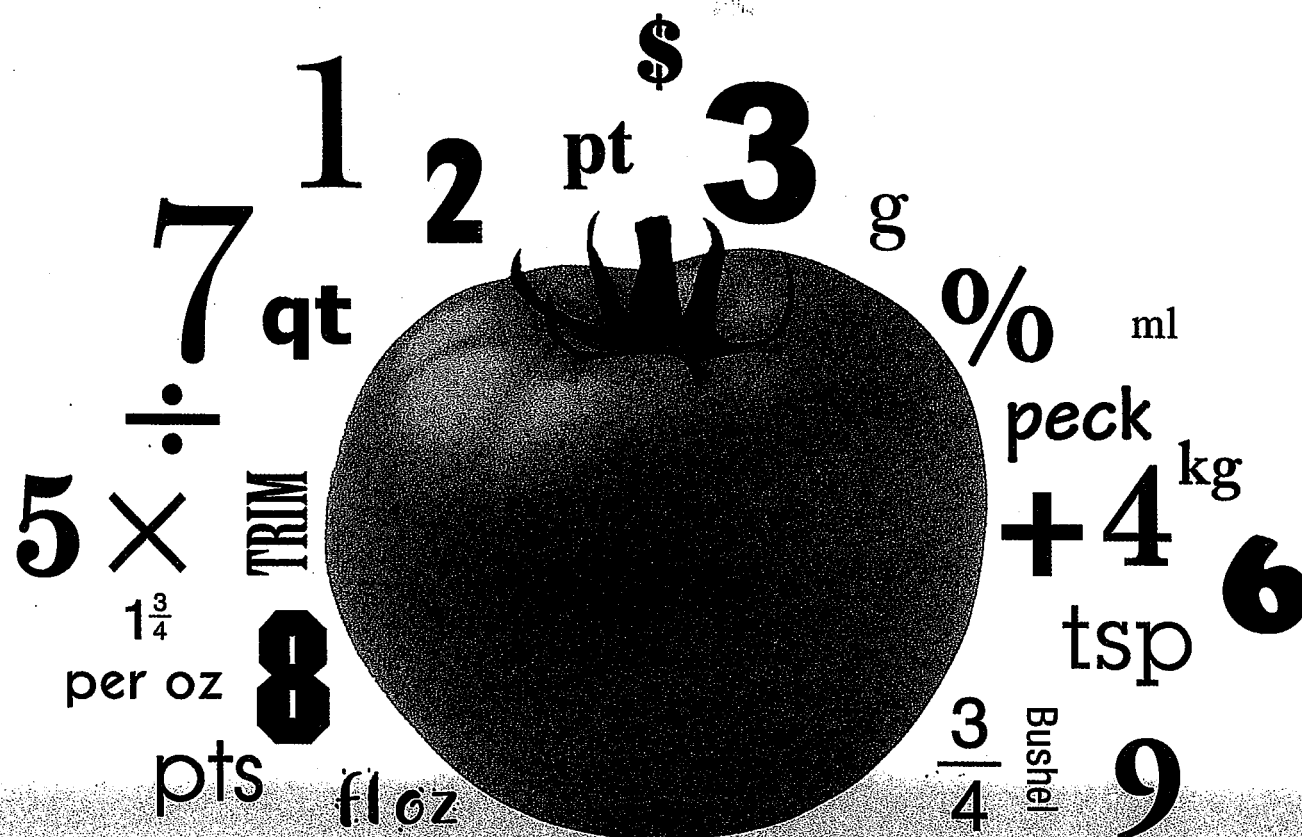


Sturtevant

Culinary Math

PRINCIPLES AND APPLICATIONS

SECOND EDITION

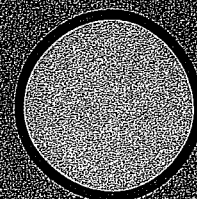
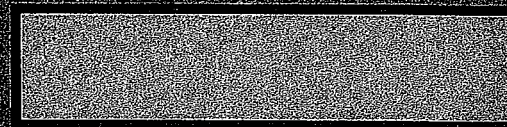
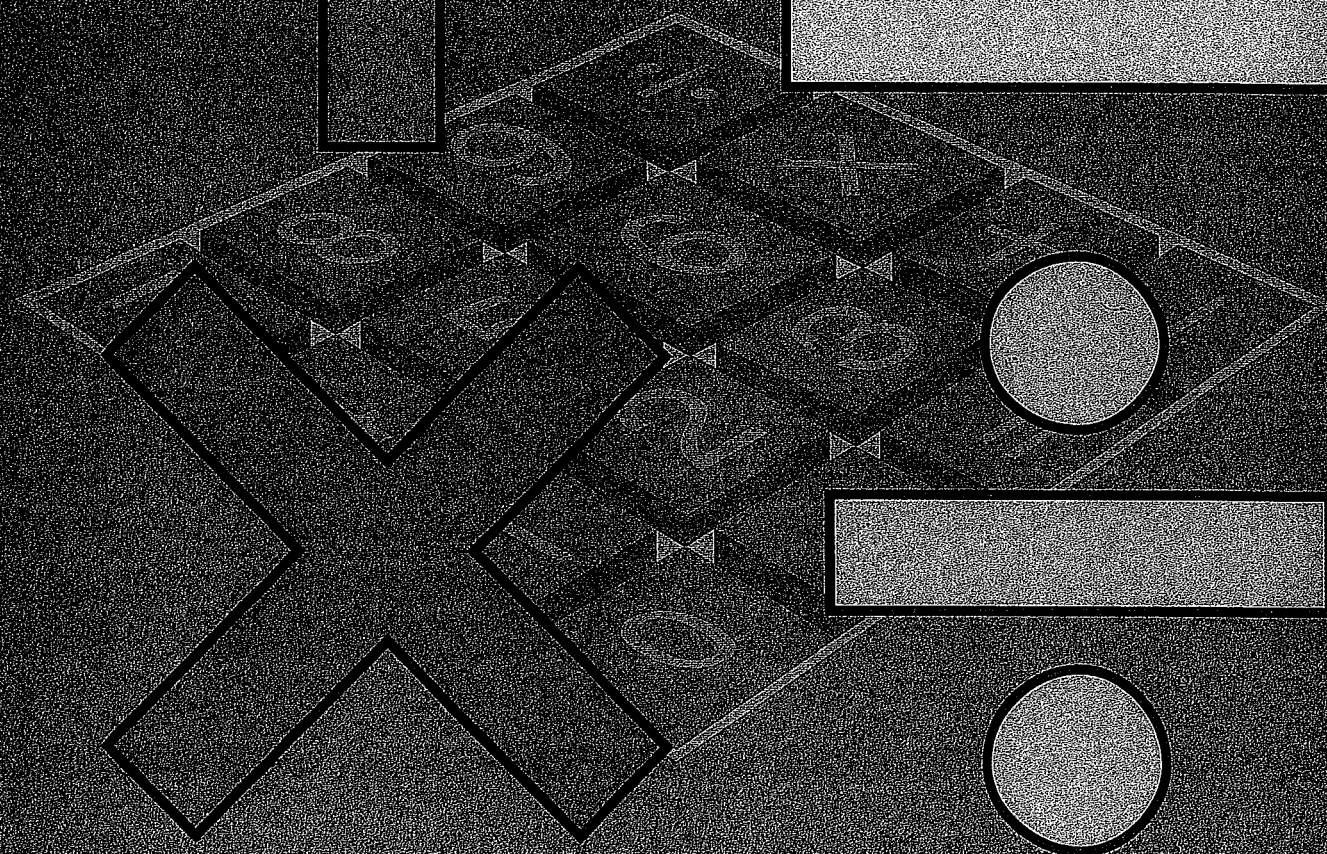


Michael J. McGreal
Linda J. Padilla

Basic Mathematics

Write-In Text
Eighth Edition

Walter C. Brown





[Home](#) - [Register](#) - [Tour](#) - [Fire Fighter Exam Samples](#) - [Fire Service Acronyms](#) - [Terms of Use](#) - [Support/Help](#) - [FAQ](#) - [About Us](#) - [Affiliate Program](#)

Practice Math questions related to fire fighting can be found below. Much of what needs to be known is basic mathematics, but our exams do include some geometry and algebra as it pertains to fire service. Use a piece of scratch paper to calculate your answer and then check the number. Remember, This sample exam IS NOT ACTIVE!. You will not be able to grade it upon completion. It is for example purposes only and does not demonstrate the actual grading functionality of our fire exams.

This is a small sample from our database of 1500+ fire fighter exam questions.

Fire Fighter Basic Mathematics Exam

1. In the following number which number after the decimal represents a thousandth?
.93456
 - ☐ 9
 - ☐ 4
 - ☐ 6
 - ☐ 3

2. L111 gets 4 miles per gallon. If L111 drives 76 miles how many gallons of diesel will it have used? Round to the nearest whole number.
 - ☐ 19
 - ☐ 20
 - ☐ 21
 - ☐ 22

3. What is the square footage of a building that is 330' X 143'?
 - ☐ 36,000
 - ☐ 42,130
 - ☐ 45,790
 - ☐ 47,190

4. If gas costs \$3.29 per gallon and you purchase 6.5 gallons, how much money will you spend?
 - ☐ \$27.19
 - ☐ \$21.39
 - ☐ \$12.39
 - ☐ \$21.45

5. During the preplan process of a building you must obtain the square footage. You have a strip mall with two occupancies. One occupancy measures 96' X 52', and the other measures 114' X 52'. What is the approximate square footage for this building?

- ☐ 10000
 - ☐ 11000
 - ☐ 12000
 - ☐ 13000
6. If a fire engine is traveling down the interstate driving 55 mph and reaches the reported vehicle fire 13 minutes, approximately how far did the engine travel? Use the following formula: Rate X Time = Distance
- ☐ 12 miles
 - ☐ 13 miles
 - ☐ 18 miles
 - ☐ 19 miles
7. There are 5 sections of 100' wildland hose and 11 sections of 50' structural hose that is being pressure tested. During hose testing 3 sections of structural hose blows. What is the total amount of wildland hose that failed the test?
- ☐ 0'
 - ☐ 150'
 - ☐ 300'
 - ☐ 1050'
8. Jim and Sarah invited seven friends over for dinner. If each friend brought one guest how many people will be at the dinner excluding Jim and Sarah
- ☐ 7
 - ☐ 9
 - ☐ 14
 - ☐ 16
9. If a fire apparatus bay is 56 feet long and the fire apparatus is 38 feet long, how many feet is left over in the bay?
- ☐ 12 feet
 - ☐ 14 feet
 - ☐ 16 feet
 - ☐ 18 feet
10. Find the average number from the following numbers. 13, 33, 2, 10, 3.
- ☐ 12.2
 - ☐ 12.4
 - ☐ 12.6
 - ☐ 12.8

This is a sample test only. Answers and rationales are provided for all 1600 questions with our paid exam preparation. Learn more...[Click Here](#)

NAME_____

MEASURING

**NUMBER ON YOUR PIECE OF
WOOD**_____

LENGTH IN INCHES_____

WIDTH IN INCHES_____

HEIGHT IN INCHES_____

SQUARE INCHES OF END OF WOOD_____

SQUARE INCHES OF FACE OF WOOD_____

CUBIC INCHES OF PIECE OF WOOD_____

MATH REVIEW FOR PLUMBING APPRENTICES

Level One Plumbing students should use this pre-test as an indicator of their current math skills. If you have problems completing any part of this test you should purchase the review book *Pre-Apprentice Training: A Test Preparation Manual for the Skilled Trades* by Jack Martin and Mary Serich (ISBN# 0964953013), available at the NIC bookstore in Campbell River and review any problem areas prior to your level one training.

Do not use a calculator for questions 1-13

1. Add the following numbers, 14, 108, 1027, 6, 339

Ans. _____

2. Add the following numbers, 1.06, 113.94, 0.642, 2.009

Ans. _____

3. Subtract 1026 from 2003

Ans. _____

4. Subtract 56.078 from 87.64

Ans. _____

5. Multiply 43 by 7

Ans. _____

COSMETOLOGY

YOU ARE ABOUT TO OPEN A NEW SALON.
CONGRATULATIONS!!!!!!!!!!!!!!

HOWEVER, THE SPACE YOU ARE RENTING NEEDS SOME WORK.

YOUR JOB IS TO DEVELOP FIT UP COSTS. LUCKILY YOU AND
YOUR FRIENDS/FAMILY WILL BE DOING SOME OF THE WORK.

PAINT: TWO WALLS ARE 9 FT. X 40 FT. EA.

TWO WALLS ARE 9 FT. X 20 FT EA.

PAINT COVERS 200 SQ. FT. PER GALLON AND COSTS

\$28.25 PER GALLON. MISC. PAINTING SUPPLIES COST

\$52.00

TOTAL PAINTING COSTS _____

FLOORING: THE SPACE YOU ARE RENTING IS 20 FT X 40 FT.

VINYL TILE COSTS \$2.00 SQ. FT.

TOTAL FLOORING COSTS _____

PLUMBING WILL COST \$1,200 PER CHAIR/ STATION.

YOU WILL HAVE SIX CHAIRS/ STATIONS

TOTAL PLUMBING COSTS _____

ELECTRICAL/ LIGHTING WILL COST \$4.25 PER SQ. FT. OF
RENTED SPACE.COSTS

TOTAL ELECTRICAL COSTS _____

FURNITURE/ COSMO CHAIRS MISC. FIT UP IS QUOTED AT
\$475.00 PER STATION.

TOTAL FURNITURE COSTS _____

MISC COSTS @ \$24.65 PER SQ. FT. OF RENTED SPACE
TOTAL MISC. COSTS _____

INVENTORY/ PRODUCTS @ \$225.00/ CHAIR
TOTAL INVENTORY COSTS _____

GRAND TOTAL _____

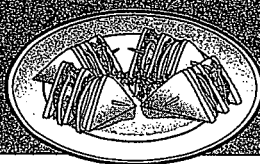
**GOOD LUCK WITH YOUR NEW
BUSINESS!!!!!!!!!!!!!!**

BTC CONTRACTING

ESTIMATE FOR JOHN DOE FOR A 8'x8' GARDEN SHED

50 PC. 2"X 6" X 8' SPRUCE	@ \$5.08 EA	-----
10 PC 1/2" PLYWOOD	@ \$20.74 EA	-----
8 PC 5/8" PLYWOOD	@ \$24.84 EA	-----
4 BUNDLES SHINGLES	@ \$35.85 EA	-----
MISC HARDWARE	@ \$53.27	-----
LABOR: 2 CARPENTERS @ 24 HOURS EA.	@ 20.50/ HR	-----
TOTAL NET COST		-----
PROFIT AND OVERHEAD 20% MATERIALS AND LABOR		-----
TOTAL COST OF ESTIMATE		-----

SIGNED ----- DATE -----



Math Exercises

Name _____ Date _____

Directions: Work each problem in the space provided. Write the final answer on the blank provided. Round any decimal answers to the hundredths places.

Example: If a soup recipe yields 3 gallons, how many 6-fluid-ounce portions will the recipe make? (*Tip: 1 gal. = 128 fl oz*)

64 portions

$$\frac{3 \cancel{\text{gal}}}{1} \times \frac{128 \text{ fl oz}}{1 \cancel{\text{gal}}} = 384 \text{ fl oz, then}$$

$$\frac{384 \cancel{\text{fl oz}}}{1} \times \frac{1 \text{ portion}}{6 \cancel{\text{fl oz}}} \times \frac{384 \text{ portions}}{6} = 64 \text{ portions}$$

_____ 1. How many grams of sugar are in a 4-pound bag of sugar?
(Tip: $1 \text{ lb} = 454 \text{ g}$)

_____ 2. If a soup recipe yields 20 gallons, how many 5-fluid-ounce portions will the recipe make? (*Tip: 1 gal. = 128 fl oz*).

_____ 3. How many 15-ounce jumbo chocolate chip cookies can be prepared from 75 pounds of cookie dough?

- _____ 4. If a chowder recipe yields 50 portions, 100 milliliters each, what is the total yield of the recipe in liters?
- _____ 5. If a salad dressing recipe calls for 3.5 liters of olive oil, is 4 quarts of olive oil enough to make the salad dressing? (*Tip: 1 qt = 0.95 L*)
- _____ 6. If a meatball recipe calls for 10 pounds of ground beef, is 5 kilograms of ground beef enough to make the meatballs? (*Tip: 1 kg = 2.2 lb*)
- _____ 7. How many 1-cup servings are in a lemonade recipe that yields 10 gallons?

CREATING A PERSONAL BUDGET

Step 1: Monthly Income

Your Monthly Take Home Pay	\$	<input style="width: 90%;" type="text"/>
Spouse's Monthly Take Home Pay	\$	<input style="width: 90%;" type="text"/>
<small>(Take Home Pay is Net pay plus any loans automatically deducted from your pay check. Mortgage, Auto, etc.)</small>		
Other Monthly Income	\$	<input style="width: 90%;" type="text"/>
Total Monthly Take Home Pay:	\$	<input style="width: 80%;" type="text"/> <div style="display: inline-block; margin-left: 10px;"> <div style="border: 1px solid black; padding: 2px 5px;">Calculate Total</div> <div style="border: 1px solid black; padding: 2px 5px; margin-left: 10px;">Clear</div> </div>

Step 2: Monthly Expenses

Housing			
Rent & Mortgage	\$	<input style="width: 90%;" type="text"/>	2nd Mortgage
		\$	<input style="width: 90%;" type="text"/>
Condo & Homeowner's Fees	\$	<input style="width: 90%;" type="text"/>	Home & Renters Insurance
		\$	<input style="width: 90%;" type="text"/>
Property Taxes (If not in mortgage)	\$	<input style="width: 90%;" type="text"/>	Home Repairs & Maintenance
		\$	<input style="width: 90%;" type="text"/>
Electric & Gas	\$	<input style="width: 90%;" type="text"/>	Water & Sewer
		\$	<input style="width: 90%;" type="text"/>
Phone & Cell	\$	<input style="width: 90%;" type="text"/>	Cable & Internet
		\$	<input style="width: 90%;" type="text"/>
Transportation:			
Car Payment 1	\$	<input style="width: 90%;" type="text"/>	Car Payment 2
		\$	<input style="width: 90%;" type="text"/>
Monthly Car Insurance	\$	<input style="width: 90%;" type="text"/>	Gasoline
		\$	<input style="width: 90%;" type="text"/>
Car Maintenance	\$	<input style="width: 90%;" type="text"/>	Parking/Tolls
		\$	<input style="width: 90%;" type="text"/>
Food and Personal:			
Groceries & Households	\$	<input style="width: 90%;" type="text"/>	Clothing for Family
		\$	<input style="width: 90%;" type="text"/>
Meals Out	\$	<input style="width: 90%;" type="text"/>	School Lunches
		\$	<input style="width: 90%;" type="text"/>
Barber & Beauty Shop	\$	<input style="width: 90%;" type="text"/>	Dry Cleaning & Laundry
		\$	<input style="width: 90%;" type="text"/>

Tobacco & Alcohol	\$	<input type="text" value="0"/>	Newspaper & Magazines	\$	<input type="text" value="0"/>
Health and Education:					
Health Insurance (If not in pay)	\$	<input type="text" value="0"/>	Prescriptions	\$	<input type="text" value="0"/>
Life Insurance(If not in pay)	\$	<input type="text" value="0"/>	School Supplies	\$	<input type="text" value="0"/>
Student Loan	\$	<input type="text" value="0"/>	College Tuition	\$	<input type="text" value="0"/>
Child Care	\$	<input type="text" value="0"/>	Child Support	\$	<input type="text" value="0"/>
Holidays/Gifts:					
Family Gifts	\$	<input type="text" value="0"/>	Employees/Co-workers Gifts	\$	<input type="text" value="0"/>
Decor/Wrapping paper	\$	<input type="text" value="0"/>	Cards/Stamps/Photos	\$	<input type="text" value="0"/>
Travel/Party Foods	\$	<input type="text" value="0"/>	Other	\$	<input type="text" value="0"/>
Other:					
Hobbies & Sports	\$	<input type="text" value="0"/>	Pet Care	\$	<input type="text" value="0"/>
Church & Charitable Donation	\$	<input type="text" value="0"/>	Other Expenses	\$	<input type="text" value="0"/>
Monthly Minimum Credit Cards	\$	<input type="text" value="0"/>	Monthly Minimum Store Cards	\$	<input type="text" value="0"/>
Total Monthly Expenses:		\$	<input type="text"/>	<input type="button" value="Calculate Total"/>	<input type="button" value="Clear"/>

Step 3: Monthly Surplus or Deficit

Total Monthly Income:	\$	<input type="text"/>
Total Monthly Expenses:	\$	<input type="text"/>
Monthly Surplus/Deficit(-) :	\$	<input type="text"/>