SURVIVAL MATH SKILLS

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Contents

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*"Whole Numbers" refers to operations using whole numbers exclusively. For an exercise in which whole numbers are multiplied by proportions, for example, a dot does not appear under the "whole numbers" column.

**"Weights/Measures" refers to the *conversion* from one unit to another. The precise skills required can be determined by examining the Teacher pages for the section.

	Computational Skills				Mathematical Content					
	Addition	Subtraction	Multiplication	Division	Tables/Graphs	Whole Numbers	Fractions	Percents/Proportions Decimals	Currency	Weights/Measures
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Introduction to the Third Edition

Survival math skills are those skills necessary for coping with the demands of modern society. They are used in planning adequate nutrition, arranging for transportation, maintaining savings and checking accounts, preparing household budgets, making credit purchases, understanding job benefits, paying taxes, and for a variety of other everyday purposes.

Educators have always recognized the need to teach everyday applications of math skills. Nevertheless, recent studies have indicated that many high school students and adults are seriously deficient in their ability to use math in order to cope with important everyday tasks. In response to these findings, schools have placed additional emphasis on the development of functional math skills during the past decade.

Survival Math Skills has been well received and widely used throughout the country because it provides numerous practical math problems for students to master. The purpose of this revision is to update the contents while maintaining the features that make it so popular.

The Contents makes it easy for you to integrate these exercises into your existing curriculum since the computation skills and mathematical content of each exercise are given there.

All of the eight sections begin with Teacher Pages that provide you with the computational skills, mathematical content, and procedure for each exercise, plus step-by-step solutions to all problems. With these answers, you will be able to find the exact point where a student has gone wrong in solving a problem.

For Students of Varying Abilities

In some cases, you may want to work through a problem or two with your less advanced students, and then let individuals or small groups try the remaining problems on their own.

You may also find it helpful to make transparencies to introduce exercises to students. The publisher grants to purchasers of this book the right to make transparencies of individual exercises for single classroom use.

Achievement Tests

You can monitor student progress by using the achievement tests included at the end of each section. You may want to administer the test both before and after using the section. This permits an estimate of the amount of learning that has occurred.

The tests consist of one or two questions on the material in each exercise. (Do not hold students responsible for test questions associated with exercises not assigned to them.)

Teachers who do not wish to use the tests for evaluation purposes may use them for instructional purposes. For example, solving the problems in the test may be done as an end-of-term or end-of-unit review activit{n

19. Housing Costs I

Part I

In the boxes are four advertisements offering apartments for rent. Each ad shows the amount of rent per month. Answer the questions.

A.

> $565+util. Attrac. 1 br. Part furn.
> No pets. No smoking. Ideal
> location. 213/662-6992

C.

> $895 + util. Beautiful views. Three br.
> No pets. Adults.
> 2 mo. security. 213/878-8354

B.

> $750 HUGE 1 BDRM.
> Util. incl. Completely furnished.
> ST. GERMAIN APARTMENTS.
> 213/480-8195

D.

> $1,150 in the heart of Brentwood! Lovely
> 2 bdrm. Carpets, wash/dry, garage &
> more. Awaits you! RENTIMES
> 213/478-1266 Fee.

1. Which apartment is the least expensive per month? _____

2. How much is the rent per month for Apartment C? $ _____

3. How much more per month is the rent for Apartment D than for Apartment A? $ _____

4. How much is the rent per year for Apartment A? $ _____

5. a. How much more per month is the rent for Apartment C than Apartment B? $ _____

   b. How much more per year is the rent for Apartment C than Apartment B? $ _____

6. Name two possible reasons why the rent is higher for the two-bedroom apartment than it is for the three-

   bedroom apartment. _____

   _____

(continued)

19. Housing Costs I *(continued)*

Part II

In the boxes are four advertisements offering houses for rent. Most people can afford to spend about 25% of what they earn for housing. Use the 25% rule when answering the following questions.

Hint: To find 25% of an amount, multiply by .25.

E.

$700 + util. Redec., 2br., carport,
stv. / ref. w/w carpt., tot ok, Bkr fee.
213/753-5461

G.

$1,200 Eagle Rock area, 2 br.,
2½ baths, frplc, air, huge
yard, 1 yr lease, 2 car garage,
cent. air
213/497-9798

F.

$975 util incl'd, 2br.,
2 bath. Kids OK, crpts, drps, yard.
HOME RENTALS FEE 213/380-8796

H.

$1,725 No fee. 4-br 2-ba. Fenced, pool,
brkfst bay, good neighborhood.
714/780-7898

7. Mr. and Mrs. Goodman together earn $4,250.00 per month. Which is the most expensive house they can afford to rent? _____

8. Mr. Wright earns $5,130 per month. Which is the most expensive house he can afford to rent?

_____

9. Ms. Encinas earns $6,900 per month. Which is the most expensive house she can afford to rent?

_____

10. Mr. Lang earns $1,100 per month. Can he afford to rent House E? _____

11. Miss Steinman earns $1,880.00 per month. Can she afford to rent House E? _____

20. Housing Costs II

Part I

In the box is part of a rental agreement that Lee Cheng signed when he rented an apartment. Read it and answer the questions.

	RECEIVED	Payable Prior to Occupancy
Rent for the period from _May 1_ to _May 31_	$_____	$ *855.00*
Last month's rent _____	$_____	$ *855.00*
Security deposit _____	$ *200.00*	$_____
Key deposit _____	$_____	$ *5.00*
Cleaning charge _____	$ *50.00*	$_____
Other _None_ _____	$_____	$_____

1. How much rent does Lee pay each month? $_____

2. How much money did the landlord receive at the time the agreement was signed? $_____

3. How much more will Lee have to give the landlord before moving in? $_____

4. When Lee decides to move, how much money will he have to pay the landlord at the beginning of his

   last month in the apartment? $_____

5. How much does Lee pay per year for the apartment? $_____

Part II

Answer the following questions about costs of buying a house.

6. a. Jill pays $1,430.90 per month to pay off the mortgage (loan) on the house she is buying. She must also buy fire insurance at $692.25 per year and real estate taxes at $1,929.33 per year. How much should she save each month in order to pay the fire insurance bill, which is sent only once a year?

   $_____

   b. How much should Jill save each month in order to pay the real estate tax bill, which is sent only once a year?

   $_____

   c. How much is Jill's total monthly housing cost including mortgage, fire insurance, and real estate taxes?

   $_____

21. Saving for Future Expenses

Answer the following questions.

1. Rena pays $1,256.78 per year for automobile insurance. She is paid monthly. How much should she save each month for her insurance?

    $_____

2. Trevor's parents live in another city. He would like to visit them in 12 weeks. The plane ticket will cost $245.60, and he will need another $100.00 for other expenses on the trip. He is paid weekly. How much should he save each week for the trip?

    $_____

3. Mr. Nuono would like to buy a motorcycle. He will need $250 for a down payment. If he saves $25 per month beginning on April 1, when will he have the $250? (Hint: Divide the amount he needs by the amount he will save per month to find out how many months he will need to save.)

    _____

4. Georgia would like to buy a new sofa for $650.00 in six months. She is paid on the first and fifteenth of each month. How much should she save each payday for the sofa? (Hint: She has 12 paydays to save for the sofa.)

    $_____

5. Bryan is getting married in eight months. He will need $1,000 for the honeymoon. He is paid on the first and fifteenth of each month. How much should he save each payday for the honeymoon?

    $_____

6. Think of three items you would like to buy that cost more than $25.00 each. List them in the first column. In the second column, write how much they will cost. The third column tells you how much to assume you can save per month. Figure out how many months it will take you to save enough money for each, and write your answers in the last column.

Items you would like to buy	Cost	Amount you can save per month	Numbers of months you will have to save
A. _____	$ _____	$ 8.00	_____
B. _____	$ _____	$12.00	_____
C. _____	$ _____	$20.00	_____

22. Budget Planning

Jenna recently graduated from high school and was hired by the ABC Company. After taxes and other deductions, she brings home $965.00 per month. She is living with her parents but wants to rent a furnished apartment. Assume that she has already moved into an apartment in your area.

Find out what the different items cost in your area. Keep in mind that Jenna does not own a car but takes a bus to work. She would like to buy a car as soon as possible. Eventually she would like to buy her own furniture. The ABC Company pays for her health insurance.

MONTHLY BUDGET

Amount per month

Total Income ....$_____

Rent..$_____

Utilities.. _____

(Telephone with Caller ID $_____, Gas $_____, Electric $ _____,

Cable $ _____, Internet access $_____)

Food and beverage .... _____

Home owner's insurance .... _____

Transportation .... _____

Credit card bills .... _____

Clothing .... _____

Recreation / vacation .... _____

Gifts / contributions .... _____

Future goals / savings .... _____

Emergencies / savings .... _____

Total .... $_____

Section 4: Household Budgeting Test

1. How much of Taylor's $39,935 annual salary is put toward his rental expense of $675.00 per month? $_____

2. Ernesto earns $1,987.00 per month. He wants to spend about 25% of his earnings on housing. How much is 25% of his monthly earnings? $_____

3. Lucy wants to rent an apartment for $665.00 per month. When she moves in, she will have to give the landlord the first month's rent, the last month's rent, and a security deposit of $150.00. What is the total amount she will have to give the landlord at move-in? $_____

4. Miss Rosco pays $980.00 per month toward her mortgage. She also pays $779.00 per year for flood insurance and $1,111.00 per year on real estate taxes. If she saves an equal amount each month to pay these housing costs, what total would she need to save? $_____

5. If Mr. and Mrs. Kreuger earn a combined yearly salary of $50,000, can they afford to spend 25% of their income toward a house that rents for $1,500.00 per month? Why or why not? _____

6. Bill pays $19.95 each month for Internet access. What is his yearly charge for this service? $_____

7. Rose is planning a vacation that will cost $650.00. She has 11 months to save for the vacation. How much should she save each month? $_____

8. Teresa is saving $500.00 each month for a new car. If the car will cost $14,916.00 after license, tax, and registration fees, how long will it take Teresa to accumulate enough to pay for the car in full? _____

9. Jake earns $1,788.50 per month after taxes. He spends $1,390.00 per month on rent, utilities, food, and transportation. How much does he have left after paying for these expenses? $_____

10. Stephanie Thisson's take-home pay for the previous year was $23,568.00. Last year, her monthly expenses averaged $900.00. After deducting expenses, she put half of her remaining earnings toward mutual fund investments. How much of her take-home pay was invested? $_____