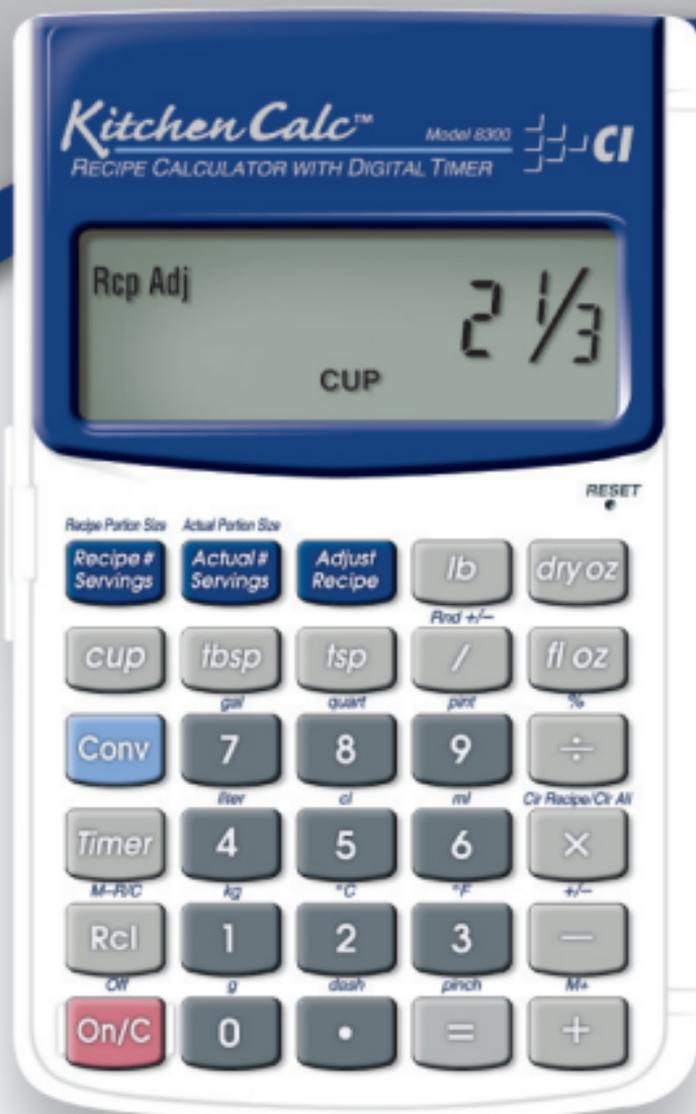


USER'S GUIDE

*Kitchen Calc*TM RECIPE CALCULATOR WITH DIGITAL TIMER



Model 8300



**CALCULATED
INDUSTRIES**

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KEY DEFINITIONS

Basic Function Keys

- On/C** *On/Clear Key* – Turns power on. Pressing once clears the display. Pressing twice clears all temporary values.
- Conv**
On/C *Off* — Turns all power off. Clears all non-permanent values.
- Rcl** *Recall* — Used with other keys to recall stored values and settings (e.g., **Rcl** **Recipe # Servings**).
- 0** – **9**
and **●** Keys used for entering numbers.



Arithmetic operation keys.



Percentage (%) — Used to find a given percent of a number.



Convert — Converts to various units (e.g., cooking units, temperature).



Memory (M+) — Adds displayed value to the standard, cumulative Memory. To subtract from Memory, press a value, then

Conv - Conv +.



Recall Memory — Displays the value saved in M+.



Memory Clear — Clears M+ and displays total.



Memory Clear (M-R/C) — Clears M+ without changing the current display.



Change Sign (+/-) — Toggle displayed value between negative and positive value.

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Conv

X

Clear Recipe Memory —

Clears the values entered into the # of Servings and Portion Size keys, as these values are permanent (the values remain stored after you turn your calculator off).

Conv

X X

Clear All — Clears all stored values, including M+, serving and portion sizing.

/

Fraction Bar Key —

Used to enter fractions (e.g., **1 / 3 cup**).

Conv

/

Remainder (Rnd +/-) —

Displays the fractional remainder (if applicable), due to calculator rounding.

This is an optional calculation and should be used if you want more precise measurements.

When the calculator has rounded by more than 5%, the display will read **^Rnd** (it has rounded up) or **vRnd** (rounded down).

When this occurs, press **Conv** **/** to display the remainder. A (+) tells you to add the additional measurement, and a (-) tells you to subtract (e.g., **Conv** **/** = + 0-1/2 TSP means you should add an additional 1/2 Teaspoon of the ingredient).

Note: If you want to minimize rounding altogether, convert to the next smallest cooking unit (e.g., if it reads Tablespoons, convert to Teaspoons).

Timer

Built-in Cooking Timer —
Accesses the count up/count down timer.

Cooking Units

Enter or convert to:

lb	Pounds
dry oz	Dry Ounces
fl oz	Fluid Ounces
cup	Cups
tbsp	Tablespoons
tsp	Teaspoons

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- Conv** **0** *g* – gram
- Conv** **1** *kg* – kilogram
- Conv** **2** °C – Celsius
- Conv** **3** °F – Fahrenheit
- Conv** **4** *liter*
- Conv** **5** *cl* – centiliter (100 ml)
- Conv** **6** *ml* – milliliter
- Conv** **7** *gal* – gallon
- Conv** **8** *quart*
- Conv** **9** *pint*
- Conv** **•** *dash*
- Conv** **=** *pinch*

Recipe Scaling Keys

- Recipe # Servings** *Recipe's Number of Servings* — Enters the recipe's stated number of servings.

- Actual # Servings** *Actual Number of Servings* — Enters your desired number of servings.

- Conv** **Recipe # Servings** *Recipe's Portion Size* — Enters the recipe's stated per-person portion size.

Conv

**Actual #
Servings**

Actual Portion Size —

Enters your desired per-person portion size.

**Adjust
Recipe**

Adjust Recipe —

Calculates adjusted ingredient sizes based on entered number of servings and/or portion size.

Rcl

**Adjust
Recipe**

Recipe Scale Factor —

Displays the ratio used for adjusting ingredients.

*Note: Values entered in Recipe Scaling Keys are stored permanently, so use **Conv** **X** to clear them. Also, to review stored values, press **Rcl** and the applicable key (e.g., **Rcl** **Recipe # Servings**).*

COOKING UNIT CONVERSIONS

With the *KitchenCalc*, converting cooking or other unit measurements is quick and easy. To convert cooking units, enter the quantity, press the cooking unit key, and then press the **Conv** key and the desired unit of measure key. To enter fractions (e.g., 1/2 cup), use the **/** key. Also, some units (like gallons) don't have dedicated keys, but are second functions of primary keys. They can be accessed using the **Conv** key.

Convert 1-1/2 tsp. to tbsp.:

KEYSTROKE	DISPLAY
-----------	---------

1 1 / 2 tsp Conv tbsp	0-1/2 TBSP
--	------------

Convert 8 fl. oz. to cups:

KEYSTROKE	DISPLAY
-----------	---------

8 fl oz Conv cup	1 CUP
--	-------

Convert 5-1/2 quarts to gallons:

KEYSTROKE	DISPLAY
-----------	---------

5 1 / 2 Conv 8 (quart)	5-1/2 QT
--	----------

Conv 7 (gal)	1-3/8 GAL
----------------------------	-----------

Convert 32 dry oz. to lbs.:

KEYSTROKE	DISPLAY
-----------	---------

3 2 dry oz Conv lb	2 LB
---	------

CONVERTING FRACTIONS TO DECIMALS

To convert cooking measurement units between fraction and decimal values, follow the example below:

Enter 1/3 cup and convert to decimal, then back to fraction:

KEYSTROKE	DISPLAY
1 / 3 cup cup	0.333 CUP
cup	0-1/3 CUP

Note: If the value entered is not a “kitchen fraction,” (e.g., 1/3 TBSP) the next press of the cooking unit key (e.g., **tblsp**) will display the rounded “kitchen value” (e.g., **0-1/2 TBSP**) and a third press will display the actual decimal value (e.g., **0.333 TBSP**).

WEIGHT/VOLUME CONVERSIONS

Cooking measurements are based on either weight or volume. Conversions between weight and volume depend on the density of the related ingredient. You can use the conversion chart on the following pages to adjust a Weight to Volume conversion based on the ingredient's density. The chart lists several common ingredients and gives you an Adjustment Factor that you can use to calculate the actual Volume of the particular ingredient.

So, if you've adjusted a recipe that now calls for 2 ½ lbs of butter, you can quickly determine how many cups of butter you'll need for the recipe.

KEYSTROKE

DISPLAY

Enter 2 ½ lbs., and convert pounds to cups:

2 1 / 2 lb Conv cup **4-3/4 CUP**

Find the conversion factor (1.042) on the chart and multiply by that for your answer:

X 1 . 0 4 2 = **5 CUP**

Note: The calculator's built-in Adjustment Factor is based on the density of water, which is often used as a standard to derive the weight of a volume specification. One cup of water weighs 236.6 grams (about 8 ounces).

USDA Weight (grams)	Volume	USDA Item Name	Adjst. Factor
110.0	Cup	Apples, raw, without skin, slices	2.151
150.0	Cup	Bananas, raw, sliced	1.577
153.0	Cup	Beans, snap, green, canned, no salt added, drained solids	1.546
148.0	Cup	Blueberries, raw	1.599
45.0	Cup	Bread crumbs, white, commercially prepared	5.258
227.0	Cup	Butter, salted	1.042
101.0	Cup	Celery, chopped	2.343
232.0	Cup	Cheese, cream	1.020
339.0	Cup	Honey	0.698
12.0	TBSP	Leavening agents, yeast, baker's, active dry	1.233
4.0	TSP	Leavening agents, yeast, baker's, active dry	1.225

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15.0	TBSP	Leavening agents, baking powder, low-sodium	0.987
5.0	TSP	Leavening agents, baking powder, low-sodium	0.980
240.0	Cup	Leavening agents, baking powder, low-sodium	0.986
4.6	TSP	Leavening agents, baking soda	1.065
246.0	Cup	Milk, reduced fat, fluid, 2% milkfat, protein fortified, with added vitamin A and D	0.962
109.0	Cup	Nuts, pecans, chopped	2.171
160.0	Cup	Onions, raw, chopped	1.479
258.0	Cup	Peanut butter, smooth, vitamin and mineral fortified	0.917
16.0	TBSP	Peanut butter, smooth, vitamin and mineral fortified	0.925
210.0	Cup	Potatoes, mashed, home-prepared, whole milk added	1.127
292.0	Cup	Salt, table	0.810
18.0	TBSP	Salt, table	0.822
6.0	TSP	Salt, table	0.817
7.5	TBSP	Spices, chili powder	1.973

2.6	TSP	Spices, chili powder	1.885
7.8	TBSP	Spices, cinnamon, ground	1.897
2.6	TSP	Spices, cinnamon, ground	1.885
7.0	TBSP	Spices, nutmeg, ground	2.114
2.2	TSP	Spices, nutmeg, ground	2.227
6.4	TBSP	Spices, pepper, black	2.313
2.1	TSP	Spices, pepper, black	2.333
152.0	Cup	Strawberries, raw, halves	1.557
200.0	Cup	Sugars, granulated	1.183
4.2	TSP	Sugars, granulated	1.167
13.0	TBSP	Vanilla extract	1.138
4.2	TSP	Vanilla extract	1.167
236.6	Cup	Water, tap, drinking	1.000
125.0	Cup	Wheat flour, all-purpose, enriched, bleached	1.893

RECIPE SCALING

CHANGING THE NUMBER OF SERVINGS

Increasing Number of Servings

You need your brownie pudding cake recipe to yield 12 Servings instead of 8. The recipe contains the following ingredients:

- 1-1/4 cups flour
- 1-1/2 cups sugar
- 1/2 cup unsweetened cocoa powder
- 2 tsp. baking powder
- 3 tbsp. butter or margarine

Convert the ingredients to 12 Servings:

KEYSTROKE	DISPLAY
<i>1. Clear recipe Memory:</i>	
Conv X (Clr Recipe)	0.
<i>2. Enter recipe's number of Servings:</i>	
8 Recipe # Servings	Rcp # 8.
<i>3. Enter desired number of Servings:</i>	
1 2 Actual # Servings	Act # 12.
<i>4. Enter ingredient amounts and Adjust Recipe:</i>	

1	1	/	4	cup	Adjust Recipe	Rcp Adj 1-7/8 CUP
1	1	/	2	cup	Adjust Recipe	Rcp Adj 2-1/4 CUP
1	/	2	cup	Adjust Recipe		Rcp Adj 0-3/4 CUP
2	tsp	Adjust Recipe				Rcp Adj 3 TSP
3	tbsp	Adjust Recipe				Rcp Adj 4-1/2 TBSP

Decreasing Number of Servings

You'd like to decrease your chicken recipe from six Servings to four Servings. The recipe contains the following ingredients:

- 2 tsp. dried rosemary leaves
- 1/2 tsp. salt
- 1/4 tsp. black pepper
- 3/4 lb. carrots, etc.

KEYSTROKE

DISPLAY

1. *Clear recipe Memory:*

Conv X (Clr Recipe) 0.

2. *Enter recipe's number of Servings:*

6 **Recipe # Servings** Rcp # 6.

3. *Enter desired number of Servings:*

4 **Actual # Servings** Act # 4.

4. *Enter ingredient amounts and Adjust Recipe:*

2 **tsp** **Adjust Recipe** Rcp Adj 1-3/8 TSP

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KEYSTROKE

DISPLAY

1 / 2 **tsp**

**Adjust
Recipe**

Rcp Adj 0-3/8 TSP ^RND *

1 / 4 **tsp**

**Adjust
Recipe**

Rcp Adj 0-1/8 TSP vRND *

3 / 4 **lb** **Adjust
Recipe**

Rcp Adj 0-1/2 LB

*There's a small remainder (0.042 of a teaspoon) you can view by pressing **Conv** **/**.

Note: The displayed values are "kitchen fractions," or rounded fractions. Two more presses of **Adjust Recipe** will display the actual fraction and decimal values, respectively.

CHANGING THE PORTION SIZE

Increasing Portion Size

You're making a stir-fried beef recipe, which is for six 4-oz. Servings. If you want to increase the Portion Size (per person) from 4 oz. to 6 oz., what are the adjusted ingredients?

- 1 lb. flank steak
- 2 tbsp. Chinese cooking wine
- 1 tbsp. minced garlic
- 2 tsp. soy sauce
- 3/4 cup chicken stock

Convert the ingredients:

KEYSTROKE

DISPLAY

1. *Clear recipe Memory:*

Conv X (Clr Recipe) 0.

2. *Enter recipe's Portion Size:*

4 Conv **Recipe # Servings** Rcp Sz 4.

3. *Enter desired Portion Size:*

6 Conv **Actual # Servings** Act Sz 6.

4. *Enter ingredient measurements and Adjust Recipe:*

1 lb **Adjust Recipe** Rcp Adj 1-1/2 LB

2 tbsp **Adjust Recipe** Rcp Adj 3 TBSP

1 tbsp **Adjust Recipe** Rcp Adj 1-1/2 TBSP

2 tsp **Adjust Recipe** Rcp Adj 3 TSP

3 / 4 cup **Adjust Recipe** Rcp Adj 1-1/8 CUP

CHANGING BOTH SERVING AND PORTION SIZE

Decreasing Portion Size and Increasing Number of Servings

Using the same recipe, you now want to decrease your Portion Size from 6 oz. to 4 oz., but increase your number of Servings from 4 to 8. What are the adjusted ingredients?

(cont'd)

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Convert the ingredients:

KEYSTROKE

DISPLAY

1. Clear recipe Memory:

Conv X (Clr Recipe) 0.

2. Enter recipe's number of Servings:

4 **Recipe # Servings** Rcp # 4.

3. Enter desired number of Servings:

8 **Actual # Servings** Act # 8.

4. Enter recipe's Portion Size:

6 **Conv** **Recipe # Servings** Rcp Sz 6.

5. Enter desired Portion Size:

4 **Conv** **Actual # Servings** Act Sz 4.

6. Enter ingredient measurements and Adjust Recipe:

1 **lb** **Adjust Recipe** Rcp Adj 1-1/3 LB

2 **tbsp** **Adjust Recipe** Rcp Adj 2-1/2 TBSP vRND *

1 **tbsp** **Adjust Recipe** Rcp Adj 1-1/2 TBSP ^RND **

2 **tsp** **Adjust Recipe** Rcp Adj 2-5/8 TSP

3 **/** **4** **cup** **Adjust Recipe** Rcp Adj 1 CUP

*Convert to teaspoons (**Conv** **tsp** = 8 TSP) to avoid the remainder.

Again, convert (**Conv **tsp** = 4 TSP).

Note: To review your stored Serving or Portion Size values, use the **Rcl** key. For example, to recall desired Portion Size, press **Rcl** **Conv** **Actual # Servings**.

TEMPERATURE CONVERSIONS

Convert 30° Celsius to Fahrenheit:

KEYSTROKE	DISPLAY
-----------	---------

3 0 Conv 2 (°C)	30° C
---	-------

Conv 3 (°F)	86.° F
---------------------------	--------

Convert 100° Fahrenheit to Celsius:

KEYSTROKE	DISPLAY
-----------	---------

1 0 0 Conv 3 Conv 2	37.8° C
--	---------

BASIC MATH WITH COOKING UNITS

What is 1-3/4 cups + 2-1/3 cups?

KEYSTROKE	DISPLAY
-----------	---------

1 3 / 4 cup +	
2 1 / 3 cup =	4-1/8 CUP

What is 1/8 tsp. times 6?

KEYSTROKE	DISPLAY
-----------	---------

1 / 8 tsp X 6 =	0-3/4 TSP
--	-----------

What is 2 tbsp. divided by 3?

KEYSTROKE	DISPLAY
-----------	---------

2 tbsp ÷ 3 =	Act 0-2/3 TBSP
---	----------------

Note: The results of math calculations will be shown as actual, not rounded, “kitchen fraction” values (see following section for more details).

DISPLAYING ACTUAL FRACTIONS VS. “KITCHEN FRACTIONS”

The *KitchenCalc* displays both actual fractions and “kitchen fractions” during conversions or recipe scaling calculations. That is, if the answer is **3/4 TBSP**, it knows there is no “3/4” of a tablespoon, or measuring spoon, available to measure with; instead, it will show the rounded answer (e.g., **1 TBSP**). For more precise measuring, you can then press the **Conv /** keys to display the remainder amount to add or subtract, or simply convert the value to the next lowest cooking unit (e.g., TSP), to avoid the remainder altogether. If you do not want to view “kitchen” values, you can display actual values by pressing the cooking unit key again.

Important Note: *The calculator will tell you when an actual value is displayed by displaying **Act**.*

Available Kitchen Fractions

TABLESPOON	TEASPOON	CUP
1 TBSP	1 TSP	1 CUP
1/2 TBSP	7/8 TSP	7/8 CUP
	3/4 TSP	3/4 CUP
	5/8 TSP	2/3 CUP
	1/2 TSP	1/2 CUP
	3/8 TSP	1/3 CUP
	1/4 TSP	1/4 CUP
	1/8 TSP	1/8 CUP

Note: 1/3 TSP, 2/3 TSP, 1/8 TBSP, 1/4 TBSP, 1/3 TBSP, 3/8 TBSP, 5/8 TBSP, 2/3 TBSP, 3/4 TBSP, 7/8 TBSP, 3/8 CUP and 5/8 CUP are not available kitchen fractions.

Basic Math – Displaying Actual vs. Kitchen Fractions

Divide 5 -1/2 tbsp. by 2:

KEYSTROKE	DISPLAY
-----------	---------

5 **1** **/** **2** **tbsp** **÷** **2** **=**

Act 2-3/4 TBSP (Actual Fraction)

tbsp 3 TBSP ^RND (Kitchen Fraction)*

tbsp Act 2.75 TBSP (Actual Decimal Value)

*Here, the calculator rounded up to a unit you can actually measure with.

Conversions – *Displaying Actual vs. Kitchen Fractions*

Convert 2-3/4 tbsp. to a “kitchen fraction,” actual decimal value, then return to the entered value:

KEYSTROKE

DISPLAY

2 **3** **/** **4** **tbsp**

2-3/4 TBSP

Conv **tbsp** 3 TBSP **^RND** (*Kitchen Fraction*)*

tbsp Act 2.75 TBSP (*Actual Decimal Value*)

tbsp Act 2-3/4 TBSP (*Actual Fraction*)

*Here, the calculator rounded up to a unit you can actually measure with.

USING THE TIMER

Using the Timer – Press **Timer** to access the built-in Timer or Timer mode. The timer can be set to count down from 24 hours or less. The Timer will count up to 12 hours.

Count Up and Pause Timer – While displaying a stopped/paused timer, press **Timer** to start counting up. While displaying a running timer, press **Timer** or **On/C** to pause or stop counting.

Count Down and Stop Timer – To set the timer to count down, follow this example:

Set the Timer for a baking time of 1 hour, 30 minutes:

KEYSTROKE	DISPLAY
<i>Access timer:</i>	HR MIN SEC
Timer	0: 00: 00
<i>Enter 1 hour:</i>	HR MIN SEC
1	0: 00: 01
<i>Enter 30 min.:</i>	HR MIN SEC
3 0	0: 01: 30
<i>Enter 0's for sec.:</i>	HR MIN SEC
0 0	1: 30: 00
<i>Start Timer:</i>	HR MIN SEC
Timer	1: 30: 00

Note: Once the countdown reaches zero, the calculator will begin to beep and the Timer will start counting up for up to an additional hour, displaying the "+" sign to remind you of the amount of time elapsed since the countdown reached zero.

Clear the Timer Display – While displaying a stopped/paused timer, press **On/C**.

Exit the Timer – To clear and exit the Timer mode, press **On/C** until **0.** is displayed. To exit the Timer Mode without clearing a paused timer or without stopping a running timer, press any key other than **On/C** and **Timer**.

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Note: If the Timer mode is exited while the timer is still running, the clock symbol will continue to blink on the display to remind you the Timer is running.

Using the Calculator While Timing –

While displaying a running timer, press any key other than **On/C** and **Timer** to exit the Timer mode and to continue using the calculator functions without interfering with Timer operations.

Note: The clock symbol will continue to blink on the display to remind you the Timer is running when in “calculator” mode.

Timer Beep – After a count-down Timer is finished counting down (zero reached), it will begin to beep. The Timer will beep for 10 minutes. To stop the Timer beep, press the **Timer** key.

Turning Calculator Off (Running Timer)

– To turn the calculator off while the Timer is running, press **Conv On/C Conv On/C**. The first press of **Conv On/C** beeps and reminds you of the running Timer; the second press turns the calculator off.

Auto Shut-Off (Running Timer) – As long as the Timer is running, the unit will not auto shut-off. However, once the Timer reaches the maximum running time and expires (see max. times below), the calculator will auto shut-off after about 8-12 minutes of non-use.

- Count-up timer: stops upon reaching 12 hours
- Count-down timer: after countdown reaches zero, the Timer starts counting up and stops upon reaching 1 hour.

ERRORS AND RESET

Errors

When an invalid conversion is attempted, the calculator will display the word **Sorry** for a few seconds before returning to the original display. When an invalid entry or calculation is made, **Error** will be displayed.

Reset

If your calculator's display should ever freeze or "lock up," press Reset, a small hole located above the **dry oz** key, using the end of a paper clip.

AUTO SHUT-OFF AND BATTERIES:

Auto Shut-Off:

After 8-12 minutes of non-use (no running Timer).

Batteries Included:

One CR1620 battery.

Battery-Life:

575 hours of actual use.

To replace the batteries, use a small Phillip's head screwdriver (or screwdriver found in eyeglass repair kits) and unscrew the single screw in the center of the battery door, located on the back of the calculator. Carefully remove the battery door, remove the old battery and replace it with one new CR1620 battery. Make sure the positive side (+) is facing up. Replace the battery door and re-attach the screw.

***Note:** Replacement CR1620 battery is available at most discount or electronics stores. Or, call Calculated Industries at 1-800-854-8075.*

For complete Warranty, Repair and Return information, go to www.calculated.com.



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Designed in the U.S.A.

Printed in China

11/11



PRG8300E-G

QUICK REFERENCE GUIDE

Cooking Conversions

KEYSTROKE	DISPLAY
On/C On/C	0.
6 tsp Conv tbsp	2 TBSP
Conv cup	0-1/8 CUP

Recipe Scaling

Your cookie recipe makes 12. You need 36. Find the adjusted ingredient measurements, if the original recipe lists:

- 1-1/2 cups flour
- 1 tsp. baking soda
- 3/4 cup brown sugar
- 1/2 cup granulated sugar
- 2-2/3 cups oats, etc.

KEYSTROKE	DISPLAY
Conv X	0.
1 2 Recipe # Servings	Rcp # 12.
3 6 Actual # Servings	Act # 36.
1 1 / 2 cup Adjust Recipe	Rcp Adj 4-1/2 CUP
1 tsp Adjust Recipe	Rcp Adj 3 TSP
3 / 4 cup Adjust Recipe	Rcp Adj 2-1/4 CUP
1 / 2 cup Adjust Recipe	Rcp Adj 1-1/2 CUP
2 3 / 4 cup Adjust Recipe	Rcp Adj 2-1/8 QT

To view answer in cups instead:

Conv cup	Rcp Adj 8-1/4 CUPS
-----------------	--------------------