WARNING – FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user’s authority to operate this equipment. Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

SHARP CORPORATION
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<td>31</td>
</tr>
<tr>
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<td>33</td>
</tr>
</tbody>
</table>
To insure trouble-free operation of your SHARP calculator, we recommend the following:

1. The calculator should be kept in areas free from extreme temperature changes, moisture, and dust.
2. A soft, dry cloth should be used to clean the calculator. Do not use solvents or a wet cloth.
3. Since this product is not waterproof, do not use it or store it where fluids, for example water, can splash onto it. Raindrops, water spray, juice, coffee, steam, perspiration, etc. will also cause malfunction.
4. If service should be required, use only a SHARP servicing dealer, a SHARP approved service facility or SHARP repair service.
5. Do not operate this unit with the insulation sheet attached; the insulation sheet prevents the battery wear while shipping, and can be found on the back of the unit's body. If the insulation sheet is not removed, the previously set date and time, as well as the tax rate information will be cleared as soon as the AC power is accidentally unplugged.
6. Do not wind the AC cord around the body or otherwise forcibly bend or twist it.

SHARP will not be liable nor responsible for any incidental or consequential economic or property damage caused by misuse and/or malfunctions of this product and its peripherals, unless such liability is acknowledged by law.
First, pull out the insulation sheet for the memory protection battery (installed for retaining the date/time/tax rate information). Reset the calculator to initialize the unit's state, then adjust the date and time before using the calculator.

**Removing the insulation sheet, and resetting**

1. Pull out the insulation sheet for the memory protection battery.

2. Press the RESET switch located on the back of the unit. (See “RESETTING THE UNIT”.)

   * The clock starts, indicating the current date and time as January 1, 2005, 12:00:00 a.m.

**Adjusting date and time**

Example: When the date is September 15, 2004, and the time is 3:38 p.m.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 - 38</td>
<td>3-38 00 P</td>
</tr>
</tbody>
</table>

(see “GRAND TOTAL / RATE SETTING MODE SELECTOR”)

* When the adjustment is complete, the clock starts at 3:38:00 p.m.
OPERATING CONTROLS

ON
OFF • P • IC

POWER SWITCH; PRINT / ITEM COUNT MODE

SELECTOR:

“OFF”: Power off.
“•”: Power ON. Set to the non-print mode.
“P”: Power ON. Set to the print mode.
“P • IC”: Power ON. Set to the print and item count mode.

1. The counter will count the number of times that the \( \pm \) key has been pressed in addition.
   Note: • Each time the \( = \) key is used in subtraction, 1 will be subtracted from the count.
   • The count is printed when the calculated result is obtained.
   • Pressing of the \( \times, \times, \div \) or \( \text{MU} \) key clears the counter.

2. When the grand total/rate setting mode selector is in the ON position (GT), the counter will count the number of times that the calculation results have been stored in the grand total memory. To print and clear the count, press the \( \text{GT} \) key.

3. The memory item counter will count the number of times that the \( = \) key has been pressed in the addition.
   Note:
   • Each time the key is used in the subtraction, 1 will be subtracted from the count.
   • The count is printed when the memory is recalled.
   • Pressing of the key clears the counter.
   Note: The counter has a maximum capacity of 3 digits (up to \( \pm 999 \)). If the count exceeds the maximum, the counter will recount from zero.
DECIMAL SELECTOR:

Presets the number of decimal places in the answer. In the “F” position, the answer is displayed in the floating decimal system.

CONSTANT/ADD MODE SELECTOR:

“K”: The following constant functions will be performed:

**Multiplication:**
The calculator will automatically remember the first number entered (the multiplicand) and $\times$ instruction.

**Division:**
The calculator will automatically remember the second number entered (the divisor) and $\div$ instruction.

“•”: Neutral

“A”: Use of the Add mode permits addition and subtraction of numbers without an entry of the decimal point. When the Add mode is activated, the decimal point is automatically positioned according to the decimal selector setting.

Use of $\times$, $\times$ and $\div$ will automatically override the Add mode and decimally correct answers will be printed at the preset decimal position.

ROUNDING SELECTOR:

“↑”: An answer is rounded up.

“5/4”: An answer is rounded off.

“↓”: An answer is rounded down.

Note: The decimal point floats during successive calculation by the use of $\times$ or $\div$.

If the decimal selector is set to “F” then the answer is always rounded down (↓).
GRAND TOTAL/RATE SETTING MODE SELECTOR:

“GT”: Grand Total

“●”: Neutral

“RATE SET”: To set the date, time, and tax rate, set this switch at the “RATE SET” position.

Date:
- Enter the month, then , then the day, then , then the year.
- Press the .
- When is pressed, the number entered is evaluated and displayed as “date” if the value is within the following range; “Error” is displayed otherwise, and the previously set date is restored.
  Month: 1 - 12; day: 1 - 31; Year: 2000 - 2099 (in 4 digits) or 00 - 99 (in 2 digits)

Time:
- Enter in the order of hour, , minutes, then press to complete the entry. (There is no entry available for the seconds value. The clock starts at zero second.)
- If the hour/minute digit is less than 10, it is not necessary to enter the first digit “0”.
- When is pressed, the number entered is evaluated and displayed as “time” if the value is within the following range; “Error” is displayed otherwise, and the previously set time is restored.
  Hour: 0 - 23 (24-hour system for the hour entry),
  Minute: 0 – 59

Tax / discount rate:
- Press twice, enter the tax rate, followed by .
• Press \( \times \) twice, enter the discount rate, followed by \( \text{TAX+} \) then \( \text{TAX+} \).

• A maximum of 4 digits can be stored (decimal point is not counted as a digit).

Note:

• Be sure to set this selector to the “ ● ” position after storing each rate.
• Only one rate can be stored. If you enter a new rate, the previous rate will be cleared.

**CLOCK / CALENDAR KEY:**

• Each time this key is pressed, the mode switches.
  Calculation mode → Date display mode → Clock display mode → Calculation mode
• Use this key also to adjust date and time (see “GRAND TOTAL / RATE SETTING MODE SELECTOR”).

**PAPER FEED KEY**

**LAST DIGIT CORRECTION KEY**

**GRAND TOTAL KEY**

**CLEAR ENTRY KEY**

**TOTAL KEY:**

Press this key twice, followed by \( \text{TAX+} \), to print the set tax rate. The tax rate is printed with the symbol “TX”.
MULTIPLICATION KEY
DIVISION KEY
MINUS EQUAL KEY
PLUS EQUAL KEY
CHANGE SIGN KEY
MARKUP KEY
MEMORY TOTAL CLEAR KEY
MEMORY SUBTOTAL RECALL KEY
MEMORY PLUS KEY
MEMORY MINUS KEY
TAX-INCLUDING KEY
PRE-TAX KEY
PERCENT KEY

NON-ADD/SUBTOTAL KEY:

Non-add – When this key is pressed right after an entry of a number in the Print mode, the entry is printed on the left-hand side with the symbol “#”. This key is used to print out numbers not subjects to calculation such as code, date, etc.

Subtotal – Used to get subtotal(s) of additions and/or subtractions. When pressed following the $\pm$ or $\mp$ key, the subtotal is printed with the symbol “◊” and the calculation may be continued.

By pressing this key even in the Non-print mode, the displayed number is printed with the symbol “P”.

10
When the POWER SWITCH; PRINT / ITEM COUNT MODE SELECTOR is set “●”, “P” or “P•IC” position, and Date or Clock is displayed, press this key to print the displayed contents, including “#” symbol, from the left side of the paper roll.

Example:
Date printing
#9 • 15 • 2004 • • • • • •
(when the date is September 15, 2004)

Clock printing
#10 • 30
A
(when the time is 10:30 a.m.)
#6 • 25
P
(when the time is 6:25 p.m.)

When the Date / Clock printing is complete, the Calculation mode is restored.

DISPLAY SYMBOLS:

M : A number has been stored in memory.
– : The display value is negative.
E : Error or overflow of capacity.
● : Appears when a number is in the grand total memory.
**INK RIBBON REPLACEMENT**

1. Remove the paper roll from the calculator. (Tear the paper and remove it from the print mechanism by using ăr.)
2. **Turn the power off before replacing ribbon.**
3. Remove the printer cover. (Fig. 1)
4. Remove the old ribbon by pulling it up.
5. Insert the new ribbon.
6. With the black side of the ribbon facing upwards, place one of the reels on the reel shaft on the right. (Fig. 2) Make sure that the reel is securely in place.
7. Thread the ribbon around the outside of the metal guides. (Fig. 3)
8. Take up any slack by manually turning one of the reels.
9. Replace the printer cover. (Fig. 4)
10. Replace the paper roll.
Never insert paper roll if torn. Doing so will cause paper to jam. Always cut leading edge with scissors first.

1. Insert the leading edge of the paper roll into the opening. (Fig. 1)
2. Turn the power on and feed the paper by pressing [ ]. (Fig. 2)
3. Insert the paper roll to the paper holder. (Fig. 3)

DO NOT PULL PAPER BACKWARDS AS THIS MAY CAUSE DAMAGE TO PRINTING MECHANISM.
There are several situations which will cause an overflow or an error condition. When this occurs, “E” will be displayed. The contents of the memory at the time of the error are retained.

If an “0.E” is displayed at the time of the error, [CE] must be used to clear the calculator. If an “E” with any numerals except zero is displayed, the error may be cleared with [CE] or [←] and the calculation can still be continued.

Also, in rare cases, printing may stop midway and the indication “E” appear on the display. This is not a malfunction but is caused when the calculator is exposed to strong electromagnetic noise or static electricity from an external source. Should this occur, press the [CE] key and then repeat the calculation from the beginning.

**Error conditions:**

1. Entry of more than 12 digits or 11 decimals. This error can be cleared with [CE] or [←].
2. When the integer portion of an answer exceeds 12 digits.
3. When the integer portion of the contents of the memory or grand total memory exceeds 12 digits. (Ex. \(999999999999\))
4. When any number is divided by zero. (Ex. \(5 \div 0 \div\))
**Time for battery replacement**

Life of the memory protection battery is approximately 2,500 hours at 25°C (77°F) with the power plug not connected to the socket.

* When the memory protection battery is weak, the date/time setting is initialized (1/1/2005, 12:00:00 a.m.).

Verify the date/time setting in the date/clock display mode when connecting the power plug to the socket.

If the date/time setting is modified or incorrect, promptly replace the memory protection battery with new one.

(The life of the pre-installed battery may be shorter than expected because of the time the calculator spends during shipment.)

**Method of battery replacement**

Use one lithium battery (CR2032).

**Caution:** Replacing the battery will clear the date and time settings, and the stored tax rate.

1. Turn the power switch “OFF” and unplug the power supply plug from the outlet.
2. Remove the battery cover on the back of the unit. (Fig. 1)
3. Remove the exhausted battery and install one new lithium battery. Wipe the battery well with a dry cloth and place the plus “+” side upward. (Fig. 2)
4. Replace the battery cover by reversing the removal procedure.
5. Press the RESET switch on the back of the unit (See “RESETTING THE UNIT”).

![Fig. 1](image1)

![Fig. 2](image2)
After battery replacement

- Connect the power supply plug to an outlet and turn the power switch “ON”.
  Check that “0.” is displayed. If “0.” is not displayed, remove the battery, reinstall it, and check the display again.
- Readjust date, time, and tax rate settings.
- On the battery replacement date label found on the back of the unit, write down the month and year when the battery is replaced, as a reference for the next battery replacement.

Precautions on battery use

- Do not leave an exhausted battery in the equipment.
- Do not expose the battery to water or flame, and do not take it apart.
- Store batteries out of the reach of small children.

Notes for handling Lithium batteries:

**CAUTION**

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer’s instructions.
SPECIFICATIONS

Operating capacity: 12 digits
Power supply:
Operating: AC: 120V, 60Hz
Memory backup: 3V ... (DC) (Lithium battery CR2032 -1)
Memory Protection Battery lifespan:
   About 2,500 hours (While at 25°C(77°F), and the power plug is not
   connected to the socket.)
CLOCK SECTION
Accuracy: Within ±90 seconds per month average (at 25°C(77°F))
Items to be displayed: month, day, year, hour, minute, second, a.m. “A”,
   p.m. “P”
Items to be printed: month, day, year, hour, minute, a.m. “A”, p.m. “P”
Time system: 12-hour
PRINTING SECTION
Printer: Mechanical printer
Printing speed: Approx. 3.7 lines/sec. (at room temperature of 25°C (77°F))
Printing paper:  57 mm(2-1/4") - 58 mm(2-9/32") wide
   80 mm(3-5/32") in diameter (max.)
Operating temperature: 0°C – 40°C (32°F – 104°F)
Power consumption: 116 mA
Dimensions: 222 mm (W) · 327 mm (D) · 79 mm (H)
   (8-3/4” (W) · 12-7/8” (D) · 3-1/8” (H))
Weight: Approx. 1.84 kg (4.06 lb.) (with battery)
Accessories:
   1 lithium battery (installed), 1 battery replacement date label (attached on
   the unit's back body), 1 paper roll, 1 ink ribbon (installed), and operation
   manual.

WARNING

THE VOLTAGE USED MUST BE THE SAME AS SPECIFIED ON THIS
CALCULATOR. USING THIS CALCULATOR WITH A HIGHER
VOLTAGE THAN THAT WHICH IS SPECIFIED IS DANGEROUS AND
MAY RESULT IN A FIRE OR OTHER TYPE OF ACCIDENT CAUSING
DAMAGE. WE ARE NOT RESPONSIBLE FOR ANY DAMAGE
RESULTING FROM USE OF THIS CALCULATOR WITH A VOLTAGE
OTHER THAN THAT WHICH IS SPECIFIED.
Strong impacts, exposure to electrical fields, or other unusual conditions may render the unit inoperative, and pressing the keys will have no effect. If this occurs, you will have to press the RESET switch on the bottom of the unit. The RESET switch should be pressed only when:

• An abnormal event occurs and all keys are disabled.

Notes:

• Pressing the RESET switch will clear the date and time settings, the tax rate setting, and the contents of memory.
• Use only a ballpoint pen to press the RESET switch. Do not use anything breakable or anything with a sharp tip, such as a needle.
• After pressing the RESET switch, connect the power supply plug to an outlet. Turn the power switch “ON” and check that “0.” is displayed.
1. Set the decimal selector as specified in each example. The rounding selector should be in the “5/4” position unless otherwise specified.
2. The constant/add mode selector and grand total/rate setting mode selector should be in the “•” position (off) unless otherwise specified.
3. The print/item count mode selector should be in the “P” position unless otherwise specified.
4. If an error is made while entering a number, press $\text{CE}$ or $\text{ }$ and enter the correct number.
5. Negative values are printed with “–” symbol in red.

**PRINTING DATE AND TIME**

**EXAMPLE:** When on October 20, 2005, 1:52:00 p.m.

<table>
<thead>
<tr>
<th>Operation Operación</th>
<th>Display Visualización</th>
<th>Print Impresión</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$</td>
<td>10-20-2005</td>
<td>#10•20•2005......</td>
</tr>
<tr>
<td>$\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$</td>
<td>0.</td>
<td>#10•20•2005......</td>
</tr>
<tr>
<td>$\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$</td>
<td>1-52 00 P</td>
<td>#1•52 P</td>
</tr>
<tr>
<td>$\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$ $\text{ }$</td>
<td>0.</td>
<td>#1•52</td>
</tr>
</tbody>
</table>

*1 : If the date is not shown on the display, press to show the date.
MIXED CALCULATION

\[(240 + 180 + 180 - 75) \times 8 = \]

<table>
<thead>
<tr>
<th>240</th>
<th>+</th>
<th>240.</th>
<th>240 • +</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>+</td>
<td>420.</td>
<td>180 • +</td>
</tr>
<tr>
<td>180</td>
<td>+</td>
<td>600.</td>
<td>180 • +</td>
</tr>
<tr>
<td>75</td>
<td>-</td>
<td>525.</td>
<td>75 • -</td>
</tr>
<tr>
<td></td>
<td>×</td>
<td></td>
<td>525 • ◊</td>
</tr>
</tbody>
</table>

525.

<table>
<thead>
<tr>
<th>8</th>
<th>÷</th>
<th>525.</th>
<th>525 • ×</th>
</tr>
</thead>
</table>

4,200.
### CONSTANT

<table>
<thead>
<tr>
<th>Operation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>$62.35 \times 11.11$</td>
<td>$62.35 \times$</td>
</tr>
<tr>
<td>$62.35 \times 22.22$</td>
<td>$11.11 = K$</td>
</tr>
<tr>
<td></td>
<td>$692.71 \times$</td>
</tr>
<tr>
<td></td>
<td>$62.35 \times$</td>
</tr>
<tr>
<td></td>
<td>$22.22 = K$</td>
</tr>
<tr>
<td></td>
<td>$1.38542 \times$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>$11.11 \div 77.77$</td>
<td>$11.11 \div$</td>
</tr>
<tr>
<td>$22.22 \div 77.77$</td>
<td>$77.77 = K$</td>
</tr>
<tr>
<td></td>
<td>$0.143 \times$</td>
</tr>
<tr>
<td></td>
<td>$22.22 = K$</td>
</tr>
<tr>
<td></td>
<td>$0.286 \times$</td>
</tr>
</tbody>
</table>
### PERCENT

\[
100 \times 25\% = \quad 100 \times \frac{25}{100} = 25.00
\]

\[
(123 \div 1368) \times 100 = \quad 123 \div 1368 \times 100 = 8.99
\]
### ADDITION AND SUBTRACTION WITH ADD MODE

\[
12.45 + 16.24 + 19.35 - 5.21 = 
\]

<table>
<thead>
<tr>
<th>Operation</th>
<th>Display</th>
<th>Print</th>
</tr>
</thead>
<tbody>
<tr>
<td>1245</td>
<td>12.45</td>
<td>12•45 +</td>
</tr>
<tr>
<td>1624</td>
<td>28.69</td>
<td>16•24 +</td>
</tr>
<tr>
<td>1935</td>
<td>48.04</td>
<td>19•35 +</td>
</tr>
<tr>
<td>521</td>
<td>42.83</td>
<td>5•21 -</td>
</tr>
<tr>
<td>*</td>
<td>42.83</td>
<td>42•83 *</td>
</tr>
</tbody>
</table>

* : [ ] was not used in the entries.
## CORRECTION OF ERRORS

### Example 1:

\[ 123 + 556 \rightarrow 123 + 456 \]

<table>
<thead>
<tr>
<th></th>
<th>123</th>
<th>556</th>
<th>456</th>
<th>123 +</th>
<th>456 +</th>
</tr>
</thead>
<tbody>
<tr>
<td>123</td>
<td>±</td>
<td>CE</td>
<td>±</td>
<td>123</td>
<td>0</td>
</tr>
<tr>
<td>556</td>
<td>CE</td>
<td>CE</td>
<td></td>
<td>579</td>
<td></td>
</tr>
<tr>
<td>456</td>
<td>±</td>
<td></td>
<td></td>
<td>579</td>
<td>579</td>
</tr>
</tbody>
</table>

### Example 2:

\[ 1234567 \rightarrow 1234578 \]

<table>
<thead>
<tr>
<th></th>
<th>1234567</th>
<th>1,234,567</th>
<th>123,456</th>
<th>12,345</th>
<th>1,234,578</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234567</td>
<td>-&gt;</td>
<td>1,234,567</td>
<td>123,456</td>
<td>12,345</td>
<td>1,234,578</td>
</tr>
</tbody>
</table>
ADD-ON AND DISCOUNT

EXAMPLE 1
A 5% add-on to 100.

\[
\begin{array}{c|c|c}
CE & 100 & \times \\
5 & \text{MU} & \\
\hline
100 & 100. & 100 \times \\
5 \% & 5.00 & \text{Increase} \quad \text{Incremento} \\
& 105.00 & \text{New amount} \quad \text{Nueva cantidad} \\
\end{array}
\]

EXAMPLE 2
A 10% discount on 100.

\[
\begin{array}{c|c|c}
100 & \times \\
10 & \text{MU} & \\
\hline
100. & 100 \times \\
- 10 \% & - 10.00 & 90.00 \star \\
90.00 & & \\
\end{array}
\]
**MARKUP AND MARGIN**

Markup and Profit Margin are both ways of calculating percent profit.

- Profit margin is percent profit vs. selling price.
- Markup is percent profit vs. cost.
- Cost is the cost.
- Sell is the selling price.
- GP is the gross profit.
- Mkup is the percent profit based on cost.
- Mrgn is the percent profit based on selling price.

<table>
<thead>
<tr>
<th>To find</th>
<th>Knowing</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrgn</td>
<td>Sell, Cost</td>
<td>Cost = Sell ± MU</td>
</tr>
<tr>
<td>Mkup</td>
<td>Sell, Cost</td>
<td>Sell ± Cost = MU</td>
</tr>
<tr>
<td>Sell</td>
<td>Cost, Mrgn</td>
<td>Cost ÷ Mrgn MU</td>
</tr>
<tr>
<td>Cost</td>
<td>Sell, Mrgn</td>
<td>Sell × Mrgn ÷ MU</td>
</tr>
<tr>
<td>Sell</td>
<td>Cost, Mkup</td>
<td>Cost ÷ Mkup ÷ MU</td>
</tr>
<tr>
<td>Cost</td>
<td>Sell, Mkup</td>
<td>Sell ÷ Mkup ÷ MU</td>
</tr>
</tbody>
</table>

**Ex./Ej.**

<table>
<thead>
<tr>
<th>Operation</th>
<th>Display</th>
<th>Print</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost $200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sell $250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GP $50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mkup 25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrgn 20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 ÷ MU</td>
<td>200.</td>
<td>200 ÷ Cost</td>
</tr>
<tr>
<td>200 ÷ MU</td>
<td>20.</td>
<td>20% M Mrgn</td>
</tr>
<tr>
<td>200 ÷ MU</td>
<td></td>
<td>25.00 × Sell</td>
</tr>
<tr>
<td>200 ÷ MU</td>
<td></td>
<td>50.00 GP GP</td>
</tr>
<tr>
<td>200 ÷ MU</td>
<td></td>
<td>50.00</td>
</tr>
</tbody>
</table>
GRAND TOTAL

\[
\begin{align*}
100 + 200 + 300 &= \\
+ (500 - 600 + 700) &= \\
\text{Grand total/Total global} &= \\
\end{align*}
\]

<table>
<thead>
<tr>
<th></th>
<th>GT</th>
<th>×</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>±</td>
<td>100.</td>
</tr>
<tr>
<td>200</td>
<td>±</td>
<td>300.</td>
</tr>
<tr>
<td>300</td>
<td>±</td>
<td>600.</td>
</tr>
<tr>
<td></td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>±</td>
<td>600.</td>
</tr>
<tr>
<td>600</td>
<td>± -</td>
<td>500.</td>
</tr>
<tr>
<td>700</td>
<td>±</td>
<td>100.</td>
</tr>
<tr>
<td></td>
<td>×</td>
<td>600.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27
MEMORY

46 × 78 = ①
+) 125 ÷ 5 = ②
−) 72 × 8 = ③

Total ④

* M *
46 ×
78 M+

3,588. M
125 ÷
5 M+

25. M
72 ×
8 M−

576. M
○ M

3,037. M

*: Press [M] to clear the memory before starting a memory calculation.
### PERCENT CHANGE

- Calculate the dollar difference (a) and the percent change (b) between two yearly sales figures $1,500 in one year and $1,300 in the previous year.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1500</td>
<td>±</td>
<td>1,500.00</td>
</tr>
<tr>
<td>1300</td>
<td>-=</td>
<td>200.00</td>
</tr>
<tr>
<td>MU</td>
<td></td>
<td>15.38</td>
</tr>
</tbody>
</table>

\[
\begin{align*}
\text{Dollar Difference (a)} &= 1,500 - 1,300 = 200.00 \\
\text{Percent Change (b)} &= \frac{200.00}{1,300} \times 100 = 15.38\% 
\end{align*}
\]
## ITEM COUNT CALCULATION

<table>
<thead>
<tr>
<th>Bill No.</th>
<th>Number of bills</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>N° de factura</td>
<td>Cantidad de facturas</td>
<td>Importe</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>$100.55</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>$200.00</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>$200.00</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>$400.55</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>$500.65</td>
</tr>
<tr>
<td>Total</td>
<td>(a)</td>
<td>(b)</td>
</tr>
</tbody>
</table>

**OFF • P P-IC**

| 100.55 | +   | 100.55 | 100•55 + |
| 200    | +   | 300.55 | 200•00 + |
| 400.55 | +   | 500.55 | 400•55 + |
| 500.65 | +   | 901.10 | 500•65 + |
| ✕      |     | 1,401.75 | 1,401.75 |

005

1,401.75 ✕ (a)

1,401.75 (b)
EXAMPLE 1: Set a 5% tax rate. Calculate the tax on $800 and calculate the total including tax.
EXAMPLE 2:
Perform two calculations using $840 and $525, both of which already include tax. Calculate the tax on the total and the total without tax.
(tax rate: 5%)

Caution!
The socket outlet shall be installed near the equipment and shall be easily accessible.

www.sharpcalculators.com
LIMITED WARRANTY

SHARP ELECTRONICS CORPORATION warrants to the first consumer purchaser that this Sharp brand product (the "Product"), when shipped in its original container, will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period(s) set forth below.

This warranty does not apply to any appearance items of the Product nor to the additional excluded item(s) set forth below nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the steps set forth below and provide proof of purchase to the servicer.

The limited warranty described herein is in addition to whatever implied warranties may be granted to purchasers by law. ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE PERIOD(S) FROM THE DATE OF PURCHASE SET FORTH BELOW. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time period described herein on behalf of Sharp.

The warranties described herein shall be the sole and exclusive warranties granted by Sharp and shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and responsibilities of Sharp to the purchaser with respect to the Product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall Sharp be liable, or in any way responsible, for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than an authorized servicer. Nor shall Sharp be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

<table>
<thead>
<tr>
<th>Your Product:</th>
<th>EL-2196BL Electronic Calculator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warranty Period for this Product:</td>
<td>Six (6) months parts and labor from date of purchase.</td>
</tr>
<tr>
<td>Additional Items Excluded from Warranty Coverage:</td>
<td>Any consumable items such as paper, maintenance cartridge, ink from Warranty Coverage : cartridges supplied with the Product or to any equipment or any hardware, software, firmware, fluorescent lamp, power cords, covers, rubber parts, or peripherals other than the Product.</td>
</tr>
<tr>
<td>How to Obtain Service:</td>
<td>Contact us at 844-578-1637 and we will consult with you about troubleshooting and warranty options.</td>
</tr>
</tbody>
</table>

TO OBTAIN SUPPLY, ACCESSORY OR PRODUCT INFORMATION, CALL 1-844-578-1637.