



**Victor 900 Calculator**  
***Teacher's Guide***

## **Lesson 1: Learning the Victor 900 Calculator**

|                   |  |
|-------------------|--|
| Overview          | Familiarize students with the calculator.                                    |
| Teacher Materials | “Learning the Victor 900 Calculator” transparency, red transparency markers. |
| Student Materials | Pencil, red crayons, “Victor 900 Calculator” worksheet, calculator           |
| Key Introduced    | <span style="border: 1px solid black; padding: 2px;">ON/AC</span>            |
| Teaching Notes    | Distribute the calculators.  |

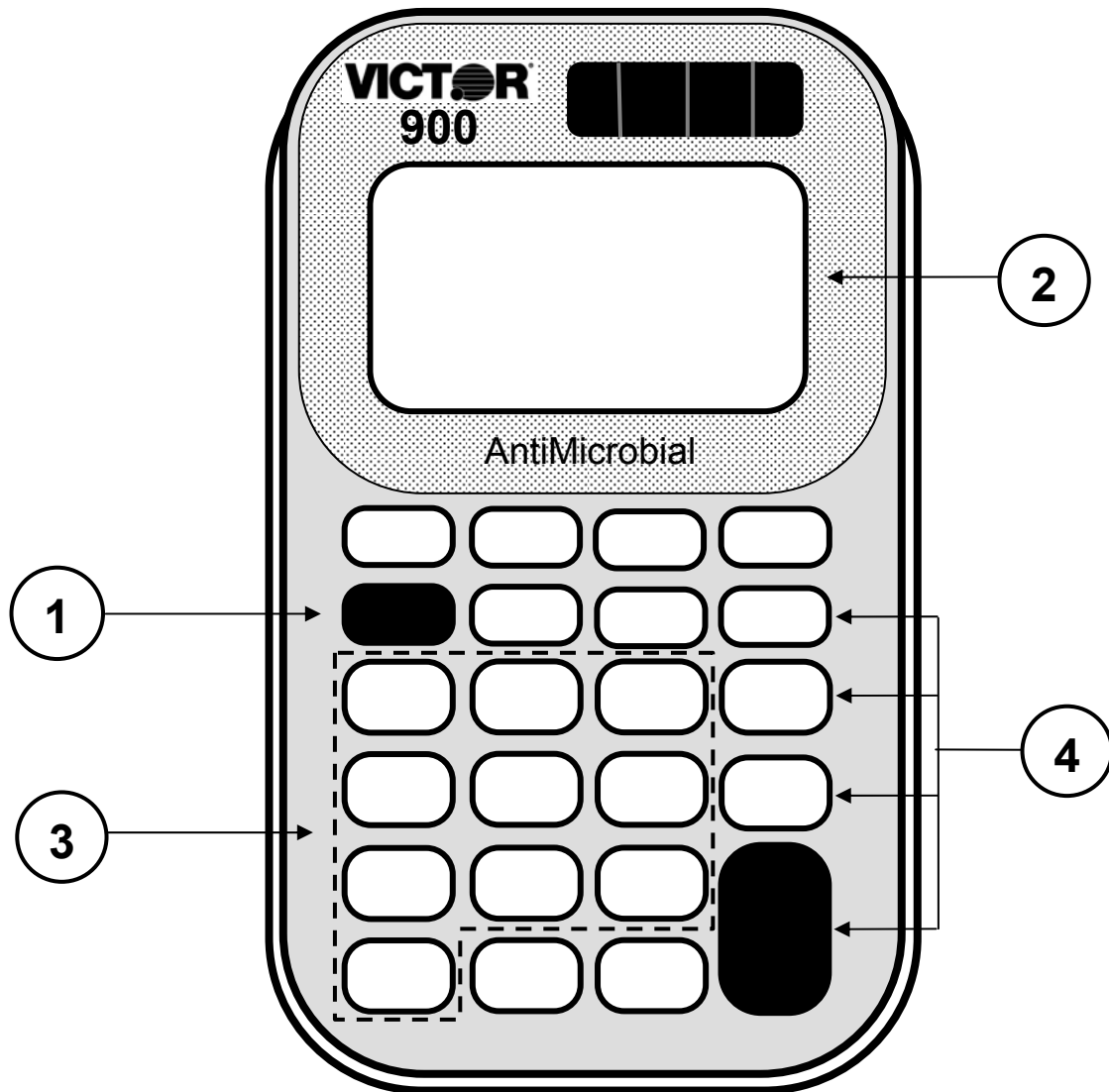
Use the transparency to discuss the keys and display of the Victor 900. Ask students to follow along on their worksheet. The ON/AC key (1) turns the calculator on and clears the display. Write “ON/AC” on the appropriate key and ask the students to do the same. Press the ON/AC key to turn the calculator on.

Show the students the location of the display (2). Ask what is showing in the display. Write a zero and a decimal point in the display. Ask the students to do the same.

Ask students to write the numbers on the number keys (3) as you do the same. Press a number key to show how the number shows on the display.

Ask students to write the math operations ( $\div$ ,  $\times$ ,  $-$ ,  $+$ ) on the math operation keys (4).

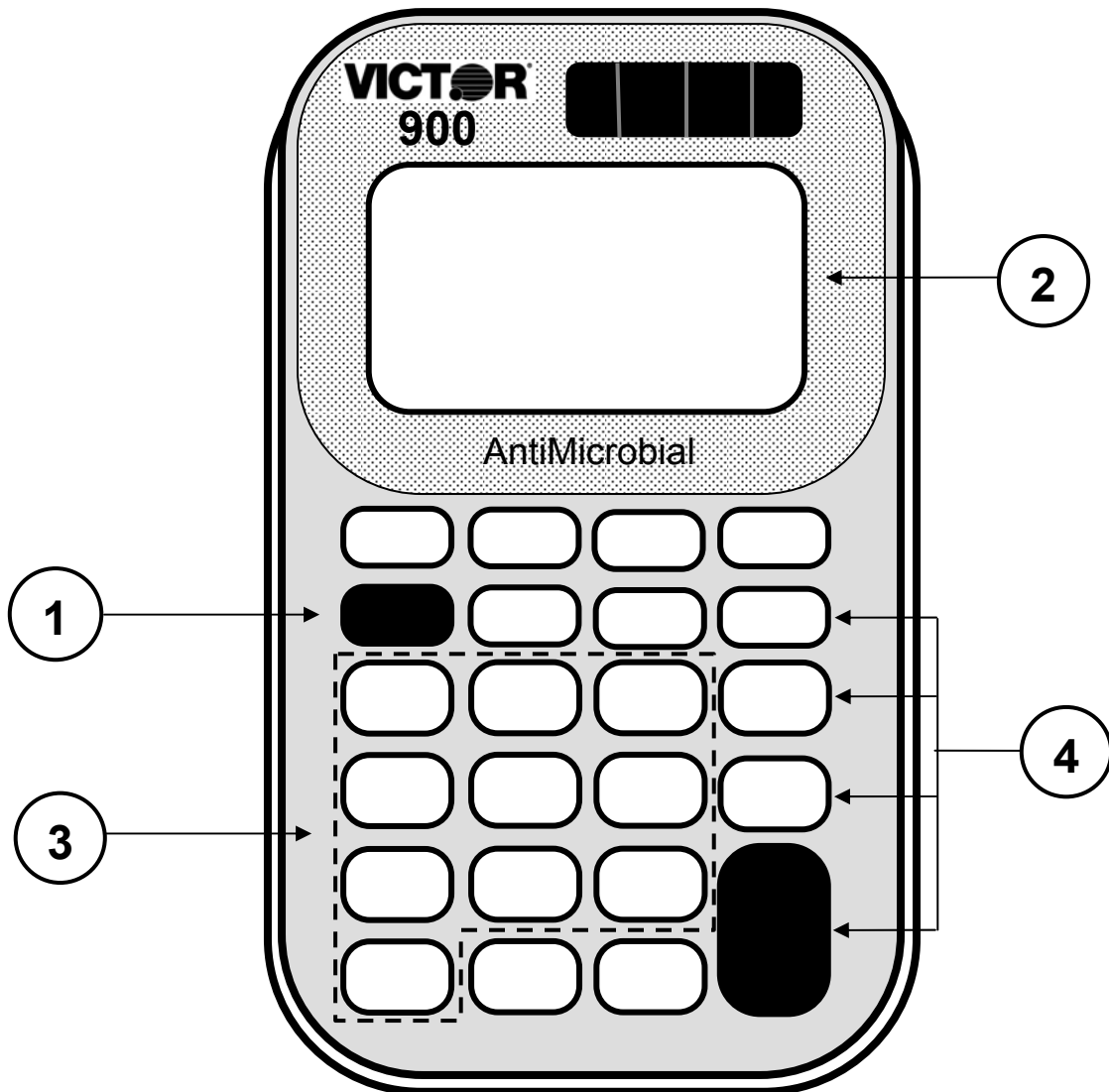
# Learning the Victor 900 Calculator



# Victor 900 Calculator



# Learning the Victor 900 Calculator



## Lesson 2: Using the Victor 900 Calculator

|                   |   |
|-------------------|---|
| Overview          | Use the calculator to enter and view numbers.   |
| Teacher Materials | “Victor 900 Calculator” transparency.   |
| Student Materials | Calculator, “Calculator Battle” worksheet, “Calculator Battle Score Sheet”, pencil.   |
| Keys Used         | 1 – 9, <input type="text" value="ON/AC"/>   |
| Teaching Notes    | <p>Distribute the calculators.</p> <p>Ask the students to press the <input type="text" value="ON/AC"/> key.</p> <p>Ask the students to press the “1” and “9” keys to enter the number “19”. Ask “How do you clear the number 19 from the display”? Answer: press the <input type="text" value="ON/AC"/> key</p> <p>To play “Calculator Battle”, pair up the students. Explain the following game rules:</p> <ul style="list-style-type: none"><li>➤ Cut out the Calculator Battle cards (one set for each pair of students).</li><li>➤ Mix the cards and place face down in one pile.</li><li>➤ Student A draws a card and enters the number on their calculator.</li><li>➤ Student B draws a card and enters the number on their calculator.</li><li>➤ The students compare the displays. The student with the largest number scores a hit and enters “1” on the score sheet.</li><li>➤ Both students press the <input type="text" value="ON/AC"/> key.</li><li>➤ The game continues until all cards are gone. The player with the most hits wins.</li></ul> |

## Calculator Battle

|          |          |          |
|----------|----------|----------|
| <b>2</b> | <b>5</b> | <b>1</b> |
| <b>7</b> | <b>6</b> | <b>9</b> |
| <b>8</b> | <b>4</b> | <b>3</b> |

# Calculator Battle Score Sheet

|                        |                        |
|------------------------|------------------------|
| <b>Student A Name:</b> | <b>Student B Name:</b> |
| <b>Hits</b>            | <b>Hits</b>            |



## **Lesson 3: Addition**

|                   |  |
|-------------------|--|
| Overview          | Use the calculator to add numbers.   |
| Teacher Materials | “Addition” and “Correcting Wrong Entries” transparencies.  |
| Student Materials | Pencil, Calculator, and “Calculator Connections” worksheet.  |
| Keys Introduced   | +, CE  |
| Teaching Notes    | <p>Display the “Addition” transparency. Ask the students to press the buttons as illustrated.</p> <p>Display the “Correcting Wrong Entries” transparency. Ask the students to press the buttons as illustrated.</p> <p>The “Calculator Connections” worksheet provides additional practice. Ask students to solve each addition problem with the calculator and connect the box with the correct answer by drawing a line.</p> |

# Addition

$$1 + 2 = ?$$
$$1 + 3 + 5 = ?$$

Press these buttons:

ON/AC

1 +

2

=

The calculator shows:

0.

1.

2.

3.

-----

-----

ON/AC

1 +

3

+

5

=

0.

1.

3.

4.

5.

9.

# Correcting Wrong Entries

$$6 + 3 = ?$$

Press these buttons:

ON/AC

6 +

2

CE

3

=

The calculator shows:

0.

6.

2.

0.

3.

9.

# Calculator Connections

Add the numbers in the boxes on the left side of the page. Draw a line to the box on the right side with the correct answer.

$$\begin{array}{r} 34 \\ + 41 \\ \hline \end{array}$$

$76$

$$\begin{array}{r} 13 \\ + 12 \\ \hline \end{array}$$

$93$

$$\begin{array}{r} 1 \\ + 19 \\ \hline \end{array}$$

$75$

$$\begin{array}{r} 72 \\ + 21 \\ \hline \end{array}$$

$77$

$$\begin{array}{r} 67 \\ + 9 \\ \hline \end{array}$$

$33$

$$\begin{array}{r} 47 \\ + 33 \\ \hline \end{array}$$

$80$

$$\begin{array}{r} 3 \\ + 74 \\ \hline \end{array}$$

$25$

$$\begin{array}{r} 11 \\ + 22 \\ \hline \end{array}$$

$20$

## **Lesson 4: Subtraction**

|                   |   |
|-------------------|---|
| Overview          | Use the calculator to subtract numbers.   |
| Teacher Materials | “Subtraction” transparency.   |
| Student Materials | Pencil, Calculator, and “Calculator Connections II”, and “Big Number Math” worksheets.  |
| Keys Introduced   | - (minus key)   |
| Teaching Notes    | Display the “Subtraction” transparency.<br><br>The “Calculator Connections” worksheet provides additional practice. Ask students to solve each subtraction problem with the calculator and connect the box with the correct answer by drawing a line. |

# Subtraction

$$9 - 5 = ?$$
$$8 - 1 - 2 = ?$$

Press these buttons:

ON/C

9 -

5

=

The calculator shows:

0.

9.

5.

4.

-----

-----

ON/C

8 -

1

-

2

=

0.

8.

1.

7.

2.

5.

## Calculator Connections II

Subtract the numbers in the boxes on the left side of the page. Draw a line to the box on the right side with the correct answer.

$$\begin{array}{r} 186 \\ - 22 \\ \hline \end{array}$$

$$121$$

$$\begin{array}{r} 54 \\ - 51 \\ \hline \end{array}$$

$$88$$

$$\begin{array}{r} 99 \\ - 11 \\ \hline \end{array}$$

$$164$$

$$\begin{array}{r} 222 \\ - 11 \\ \hline \end{array}$$

$$211$$

$$\begin{array}{r} 677 \\ - 556 \\ \hline \end{array}$$

$$3$$

$$\begin{array}{r} 69 \\ - 42 \\ \hline \end{array}$$

$$27$$

$$\begin{array}{r} 32 \\ - 18 \\ \hline \end{array}$$

$$26$$

$$\begin{array}{r} 55 \\ - 29 \\ \hline \end{array}$$

$$14$$

## Big Number Math

Use your calculator to subtract the big numbers in the boxes and write down the answers. Circle the biggest answer.

$$\begin{array}{r} 72,456 \\ -51,432 \\ \hline \end{array}$$

$$\begin{array}{r} 98,744 \\ -10,221 \\ \hline \end{array}$$

$$\begin{array}{r} 189,456 \\ -10,432 \\ \hline \end{array}$$

$$\begin{array}{r} 5,687 \\ -3,216 \\ \hline \end{array}$$

$$\begin{array}{r} 984,300 \\ -213,498 \\ \hline \end{array}$$

$$\begin{array}{r} 676,345 \\ -99,999 \\ \hline \end{array}$$

$$\begin{array}{r} 780,780 \\ -175,175 \\ \hline \end{array}$$

$$\begin{array}{r} 54,893 \\ -55,221 \\ \hline \end{array}$$



## Lesson 5: Repetitive Subtraction and Addition

|                   |  |
|-------------------|--|
| Overview          | Use the calculator to subtract or add repetitive numbers using the constant function.  |
| Teacher Materials | “Repetitive Subtraction and Addition” and “Fastest Fingers” transparencies.  |
| Student Materials | Pencil, Calculator, and “Constant Calculations” worksheet.   |
| Keys Introduced   | Constant function using the $\boxed{=}$ Key.   |
| Teaching Notes    | <p>Ask your students to enter 10 on the calculator and add 10 to the total every time you snap your fingers. Snap your fingers 4 times and compare the answers from several students (the answer should be 50).</p> <p>Tell the students how the calculator stores the last command and number entered. This is called the constant function. The constant function helps reduce mistakes and save time when you must subtract, add, divide, or multiply the same number many times.</p> <p>Ask your students to again enter 10 on the calculator and add 10 every time you snap your fingers. Snap your fingers 4 times and compare the answers.</p> <p>Note: The constant is removed from memory when the <math>\boxed{\text{ON/AC}}</math> button is pushed.</p> <p>Use the “Fastest Fingers” transparency to play a fun game that reinforces the constant function.</p> <p>Use the “Constant Calculations” worksheet for practice.</p> |

# Repetitive Subtraction and Addition

$$15 - 3 - 3 - 3 = ?$$

$$6 + 2 + 2 + 2 = ?$$

Press these buttons:

ON/AC

15 -

3 =

=

=

The calculator shows:

0.

15.

12.

9.

6.

-----

-----

ON/AC

6 +

2 =

=

=

0.

6.

8.

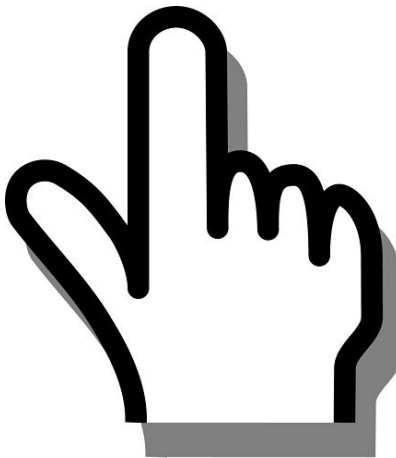
10.

12.

## Fast Fingers

Enter  $500 + 5 =$  on your calculator. When the teacher says “Go” add one to your calculator as many times as you can until the teacher says “stop”.

The student with the largest number has the fastest fingers.



Winning total: \_\_\_\_\_

Name of Student with the Fastest Fingers

\_\_\_\_\_

## Constant Calculations

Use the  $\boxed{=}$  key to work these constant calculations.

1.  $94 - 6 - 6 - 6 =$  \_\_\_\_\_

2.  $945 + 12 + 12 + 12 =$  \_\_\_\_\_

3.  $543 - 10 - 10 - 10 - 10 =$  \_\_\_\_\_

4.  $345 + 22 + 22 + 22 + 22 =$  \_\_\_\_\_

5.  $27 - 3 - 3 - 3 - 3 - 3 =$  \_\_\_\_\_

6.  $45 + 5 + 5 + 5 + 5 + 5 =$  \_\_\_\_\_

7.  $1000 - 100 - 100 - 100 - 100 =$  \_\_\_\_\_

8.  $2000 + 50 + 50 + 50 + 50 + 50 =$  \_\_\_\_\_

9.  $948 - 8 - 8 - 8 - 8 - 8 - 8 =$  \_\_\_\_\_

10.  $604 + 4 + 4 + 4 + 4 + 4 + 4 =$  \_\_\_\_\_

11.  $9987 - 3 - 3 - 3 - 3 - 3 - 3 =$  \_\_\_\_\_

12.  $100 + 9 + 9 + 9 + 9 + 9 + 9 =$  \_\_\_\_\_

## Lesson 6: Multiplication

|                   |  |
|-------------------|--|
| Overview          | Use the calculator to multiply numbers.  |
| Teacher Materials | “Multiplication” and “Multiplication Mountain Answer Key”, “Multiplying Multiple Numbers”, and “Repetitive Multiplication” transparencies.   |
| Student Materials | Pencil, Calculator, and “Multiplication Mountain”, “Multiplication Calculator Battle”, and “Calculator Connections III” worksheet.   |
| Keys Introduced   | <input type="checkbox"/>   |
| Teaching Notes    | <p>Display the “Multiplication” transparency. Ask the students to follow along with you as you discuss the exercise.</p> <p>The “Multiplication Mountain” worksheet provides additional practice. Ask students to solve each multiplication problem with the calculator and fill in the illustration.</p> <p>To play “Multiplication Calculator Battle”, pair up the students. Explain the following game rules:</p> <ul style="list-style-type: none"><li>➤ Cut out the Multiplication Calculator Battle cards (one set for each pair of students).</li><li>➤ Mix the cards and place face down in one pile.</li><li>➤ Student A draws two cards and multiplies the numbers on their calculator.</li><li>➤ Student B draws two cards and multiplies the numbers on their calculator.</li><li>➤ The students compare the displays. The student with the largest number scores a hit and enters “1” on the score sheet.</li><li>➤ Both students press the <input type="checkbox"/> ON/AC key.</li><li>➤ The game continues until all cards are gone. The player with the most hits wins.</li><li>➤ To extend the game, mix the cards and start again</li></ul> <p>The “Calculator Connections III” worksheet provides additional practice. Ask students to solve each multiplication problem with the calculator and connect the box with the correct answer by drawing a line.</p> |

# Multiplication

$$6 \times 8 = ?$$
$$43 \times 5 = ?$$

Press these buttons:

ON/AC

6 X

8

=

The calculator shows:

0.

6.

8.

48.

-----

-----

ON/AC

43 X

5

=

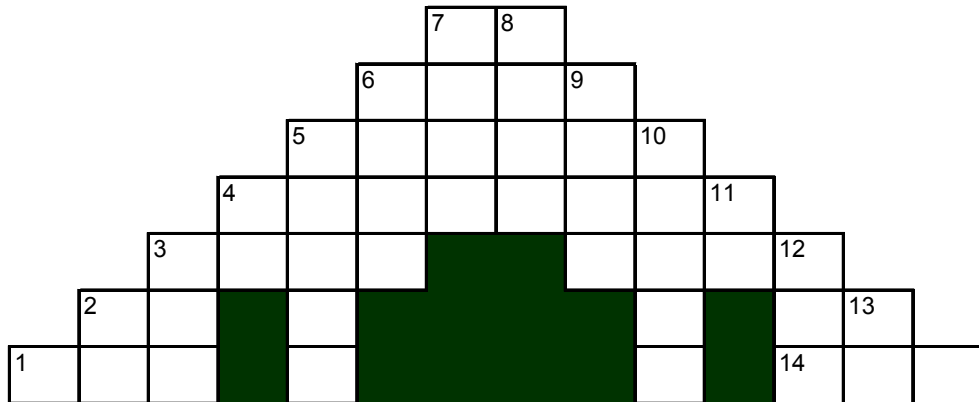
0.

43.

5.

215.

# Multiplication Mountain



Across

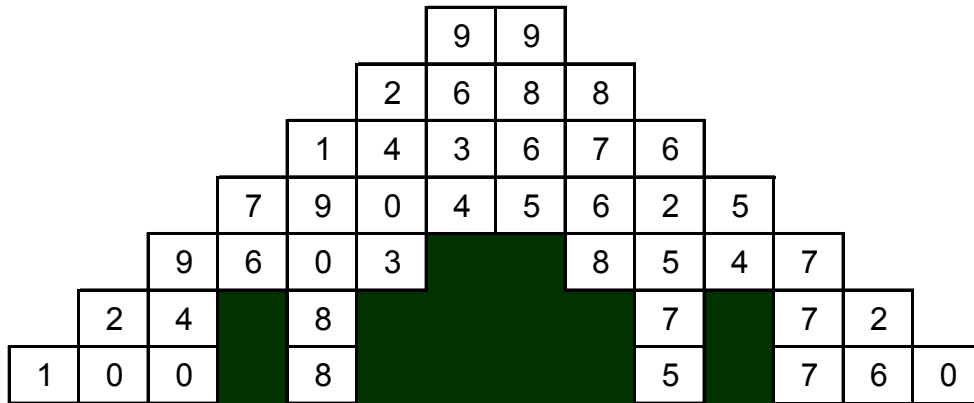
- 1  $10 \times 10 =$  \_\_\_\_\_
- 2  $6 \times 4 =$  \_\_\_\_\_
- 3  $3 \times 3,201 =$  \_\_\_\_\_
- 4  $25 \times 3,161,825 =$  \_\_\_\_\_
- 5  $156 \times 921 =$  \_\_\_\_\_
- 6  $48 \times 56 =$  \_\_\_\_\_
- 7  $11 \times 9 =$  \_\_\_\_\_
- 14  $19 \times 40 =$  \_\_\_\_\_

Down

- 2  $5 \times 4 =$  \_\_\_\_\_
- 3  $47 \times 20 =$  \_\_\_\_\_
- 4  $19 \times 4 =$  \_\_\_\_\_
- 5  $16 \times 1,193 =$  \_\_\_\_\_
- 6  $27 \times 89 =$  \_\_\_\_\_
- 7  $2 \times 4,817 =$  \_\_\_\_\_
- 8  $1,973 \times 5 =$  \_\_\_\_\_
- 9  $32 \times 274 =$  \_\_\_\_\_
- 10  $2,503 \times 25 =$  \_\_\_\_\_
- 11  $27 \times 2 =$  \_\_\_\_\_
- 12  $11 \times 7 =$  \_\_\_\_\_
- 13  $13 \times 2 =$  \_\_\_\_\_

# Multiplication Mountain

## Answer Key





# Multiplying Multiple Numbers

$$6 \times 8 \times 2 = ?$$

Press these buttons:

ON/AC

6 X

8

X

2

=

The calculator shows:

0.

6.

8.

48.

2.

96.

# Repetitive Multiplication

$$4 \times 2 = ?$$

$$4 \times 4 = ?$$

$$4 \times 6 = ?$$

$$4 \times 8 = ?$$

Press these buttons:

ON/AC

4 X

2

=

4

=

6

=

8

=

The calculator shows:

0.

4.

2.

8.

4.

16.

6.

24.

8.

32.

## Multiplication Calculator Battle

|           |           |           |
|-----------|-----------|-----------|
| <b>12</b> | <b>51</b> | <b>17</b> |
| <b>23</b> | <b>48</b> | <b>9</b>  |
| <b>37</b> | <b>38</b> | <b>39</b> |
| <b>65</b> | <b>42</b> | <b>15</b> |

# Multiplication Calculator Battle Score Sheet

|                        |                        |
|------------------------|------------------------|
| <b>Student A Name:</b> | <b>Student B Name:</b> |
| <b>Hits</b>            | <b>Hits</b>            |

## Calculator Connections III

Multiply the numbers in the boxes on the left side of the page. Draw a line to the box on the right side with the correct answer.

$$\begin{array}{r} 32 \\ \times 4 \\ \hline \end{array}$$

160

$$\begin{array}{r} 12 \\ \times 35 \\ \hline \end{array}$$

627

$$\begin{array}{r} 8 \\ \times 20 \\ \hline \end{array}$$

128

$$\begin{array}{r} 57 \\ \times 11 \\ \hline \end{array}$$

144

$$\begin{array}{r} 72 \\ \times 2 \\ \hline \end{array}$$

420

$$\begin{array}{r} 81 \\ \times 4 \\ \hline \end{array}$$

2,816


$$\begin{array}{r} 110 \\ \times 5 \\ \hline \end{array}$$

324

$$\begin{array}{r} 64 \\ \times 44 \\ \hline \end{array}$$

550

## **Lesson 7: Division**

|                   |  |
|-------------------|--|
| Overview          | Use the calculator to divide numbers.  |
| Teacher Materials | “Two Methods for Writing Division Problems”, “Division”, and “Repetitive Division” transparencies. |
| Student Materials | Pencil, Calculator, and “Calculator Connections IV” worksheet.                                     |
| Keys Introduced   |                   |
| Teaching Notes    | Display the transparencies. Ask the students to follow along with you as you discuss the exercise. |

The “Calculator Connections IV” worksheet provides additional practice. Ask students to solve each division problem with the calculator and connect the box with the correct answer by drawing a line.

# Two Methods for Writing Division Problems

## Hand Written Method

$$\begin{array}{r} \text{Quotient} \\ \downarrow \\ 8 \\ 6 \overline{) 48} \\ \text{Divisor} \quad \text{Dividend} \end{array}$$

## Calculator Method

$$\begin{array}{c} \text{Divisor} \\ \downarrow \\ 48 \div 6 = 8 \\ \text{Dividend} \quad \text{Quotient} \end{array}$$

# Division

$$48 \div 6 = ?$$

$$81 \div 3 = ?$$

Press these buttons:

ON/AC

48 ÷

6

=

The calculator shows:

0.

48.

6.

8.

-----

-----

ON/AC

81 ÷

3

=

0.

81.

3.

27.



# Repetitive Division

$$100 \div 4 = ?$$

$$40 \div 4 = ?$$

$$88 \div 4 = ?$$

$$52 \div 4 = ?$$

Press these buttons:

ON/AC

100 ÷

4

=

40

=

88

=

52

=

The calculator shows:

0.

100.

4.

25.

40.

10.

88.

22.

52.

13.

## Calculator Connections IV

Divide the numbers in the boxes on the left side of the page. Draw a line to the box on the right side with the correct answer.

$$\begin{array}{r} 125 \\ \div 25 \\ \hline \end{array}$$

$$100$$

$$\begin{array}{r} 49 \\ \div 7 \\ \hline \end{array}$$

$$6$$

$$\begin{array}{r} 1000 \\ \div 10 \\ \hline \end{array}$$

$$5$$

$$\begin{array}{r} 66 \\ \div 11 \\ \hline \end{array}$$

$$7$$

$$\begin{array}{r} 72 \\ \div 2 \\ \hline \end{array}$$

$$36$$

$$\begin{array}{r} 888 \\ \div 4 \\ \hline \end{array}$$

$$110$$


$$\begin{array}{r} 550 \\ \div 5 \\ \hline \end{array}$$

$$222$$

$$\begin{array}{r} 147 \\ \div 21 \\ \hline \end{array}$$

$$7$$

## Lesson 8: Division with Remainders

|                   |  |
|-------------------|--|
| Overview          | Use the calculator to divide numbers with remainders.  |
| Teacher Materials | “Two Methods for Writing Division with Remainders”, “Division with Remainders”, “Repetitive Division with Remainders”, and “Calculating the Remainder”, transparencies.  |
| Student Materials | Pencil, Calculator, and “Calculator Connections V” worksheet.  |
| Keys Introduced   |   |
| Teaching Notes    | <p>Display the transparencies. Ask the students to follow along with you as you discuss the exercise.</p> <p>Inform the students how the calculator displays the “remainder” as digits to the right of the decimal point. Use the “Calculating the Remainder” transparency to show how to determine the remainder. To find the remainder, multiply the number to the left of the decimal point by the divisor. Then subtract the result from the dividend to get the remainder.</p> <p>The “Calculator Connections V” worksheet provides additional practice. Ask students to solve each division problem with the calculator and connect the box with the correct answer by drawing a line.</p> |

## Two Methods for Writing Division with Remainder Problems

### Hand Written

Quotient      Remainder

$$\begin{array}{r} 9.6 \\ 5 \overline{) 48} \end{array}$$

Divisor      Dividend

### Calculator Method

Divisor      Remainder

$$48 \div 5 = 9.6$$

Dividend      Quotient

# Division with Remainders

$$48 \div 5 = ?$$

$$74 \div 6 = ?$$

Press these buttons:

ON/AC

48 ÷

5

=

The calculator shows:

0.

48.

5.

9.6

-----

-----

ON/AC

74 ÷

6

=

0.

74.

6.

12.3333333

## Repetitive Division with Remainders

$$100 \div 6 = ?$$

$$40 \div 6 = ?$$

$$88 \div 6 = ?$$

$$52 \div 6 = ?$$

Press these buttons:

**ON/AC**

**100** **÷**

**6**

**=**

**40**

**=**

**88**

**=**

**52**

**=**

The calculator shows:

0.

100.

6.

16.666666

40.

6.666666

88.

14.666666

52.

8.666666

# Calculating the Remainder

$$76 \div 8 = ?$$

Press these buttons:

ON/AC

76 ÷

8

=

The calculator shows:

0.

76.

8.

9.5

-----

-----

9 X

8

=

9

8.

72

-----

-----

76 -

72

=

76.

55.

4.

The remainder is 4.

## Calculator Connections V

Divide the numbers in the boxes on the left side of the page. Draw a line to the box on the right side with the correct answer.

$$\begin{array}{r} 164 \\ \div 5 \\ \hline \end{array}$$

36.571428

$$\begin{array}{r} 32 \\ \div 9 \\ \hline \end{array}$$

8.8846153

$$\begin{array}{r} 256 \\ \div 7 \\ \hline \end{array}$$

12.75

$$\begin{array}{r} 23 \\ \div 12 \\ \hline \end{array}$$

3.5555555

$$\begin{array}{r} 231 \\ \div 26 \\ \hline \end{array}$$

2.5

$$\begin{array}{r} 20 \\ \div 8 \\ \hline \end{array}$$

32.8

$$\begin{array}{r} 51 \\ \div 4 \\ \hline \end{array}$$


1.9166666

$$\begin{array}{r} 147 \\ \div 21 \\ \hline \end{array}$$

7.



## **Lesson 9: Decimals**

|                   |   |
|-------------------|---|
| Overview          | Use the calculator to add and subtract numbers with decimals.   |
| Teacher Materials | “Decimals” transparency   |
| Student Materials | Pencil, Calculator, “Calculator Connections VI” worksheet, “Estimation Exploration” worksheet, and “I Love Decimals” worksheet.   |
| Keys Introduced   |    |
| Teaching Notes    | <p>The “Calculator Connections VI” worksheet provides additional practice. Ask students to solve each math problem with the calculator and connect the box with the correct answer by drawing a line.</p> |

The “Estimation Exploration” worksheet, is an additional way to have a fun time with decimals. It shows the difference between estimated and exact answers. It is another way to improve skills and learn more about decimals and using the calculator.

# Decimals

$$2.5 + 5.3 = ?$$

$$7.4 - 6.1 = ?$$

Press these buttons:

ON/AC

2.5 +

5.3

=

The calculator shows:

0.

2.5

5.3

7.8

-----

-----

ON/AC

7.4 -

6.1

=

0.

7.4.

6.1

1.3

# Calculator Connections VI

Add the Decimals in the boxes on the left side of the page. Draw a line to the box on the right side with the correct answer.

$$\begin{array}{r} 16.4 \\ + 5.3 \\ \hline \end{array}$$

$1.5$

$$\begin{array}{r} 3.2 \\ - 1.7 \\ \hline \end{array}$$

$3.5$

$$\begin{array}{r} 2.5 \\ + 7.1 \\ \hline \end{array}$$

$21.7$

$$\begin{array}{r} 2.3 \\ + 1.2 \\ \hline \end{array}$$

$20.5$

$$\begin{array}{r} 23.1 \\ - 2.6 \\ \hline \end{array}$$

$13.8$

$$\begin{array}{r} 9.7 \\ + 4.1 \\ \hline \end{array}$$

$12.5$

$$\begin{array}{r} 5.1 \\ - 1.4 \\ \hline \end{array}$$

$9.6$

$$\begin{array}{r} 14.7 \\ - 2.2 \\ \hline \end{array}$$

$3.7$

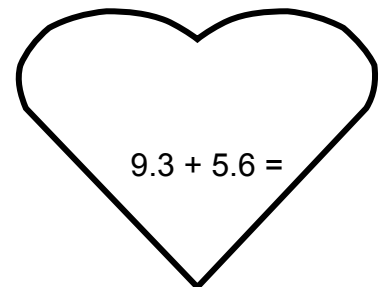
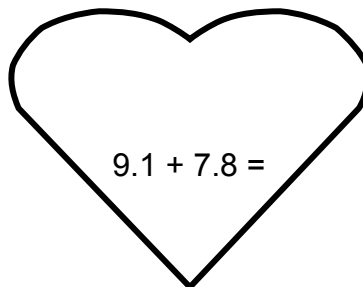
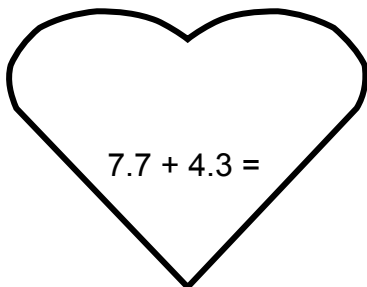
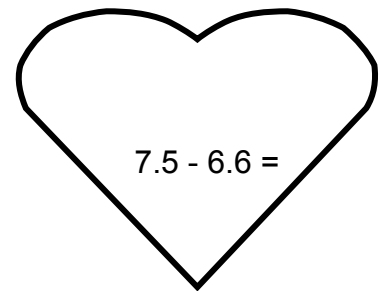
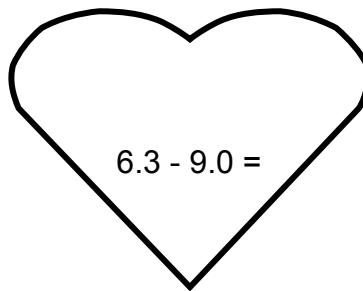
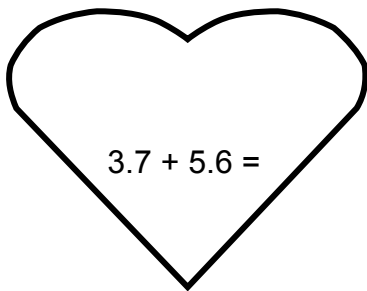
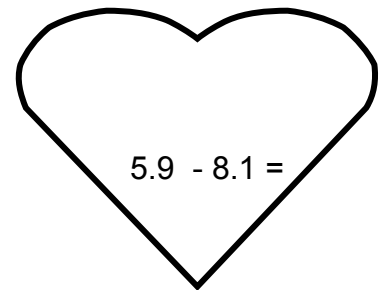
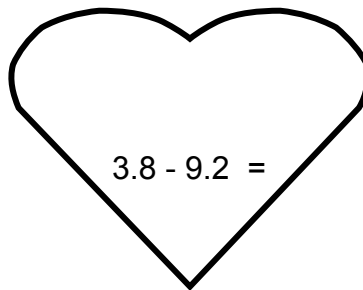
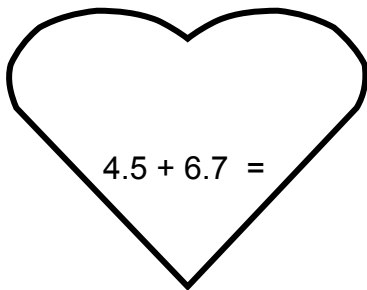
**I Love Decimals**

Estimate the answer for the math problems then use your calculator to check the answers. Write your estimates in the left arc of the hearts and the calculator answers in the right arcs.

Example:

*Estimate* →  $8.0$       $8.1$  ← *Calculator*

$5.7 + 2.4 =$



## Lesson 10: Memory

|                   |  |
|-------------------|--|
| Overview          | Use the calculator to add and subtract numbers and store the numbers in the calculator's memory  |
| Teacher Materials | "Calculator Memory", "Adding Products with Memory", and "Find the Total Cost Using Memory", transparencies.  |
| Student Materials | Pencil, Calculator, and "Million Memory Magic" worksheet.  |
| Keys Introduced   | <span>MRC</span> <span>M+</span> <span>M-</span>   |
| Teaching Notes    | <p>Talk to the students about memory, and how it works on a calculator. The memory icon will appear on the calculator screen when a number has been stored. To view the stored number, press the MRC button once. MRC stands for "Memory Recall &amp; Clear". If the MRC key is pressed twice, the memory is cleared.</p> <p><span>M+</span> Adds the displayed number to the memory of the calculator</p> <p><span>M-</span> Subtracts the displayed number from the memory of the calculator</p> <p><span>MRC</span> Displays the number from the memory onto the screen of the calculator</p> <p><span>MRC</span> <span>MRC</span> Clears the memory</p> <p>The Million Memory Magic worksheet is for students to practice using the memory function of the calculator. It is to be done individually to test the skills learned in the lesson. Understanding this worksheet will show fulfillment and accomplishment with this lesson.</p> <p>You should ask students to press the MRC key twice before the exercise ... to make sure everyone starts with a clear memory.</p> |

## Calculator Memory

**M+**

Adds the displayed number to the memory of the calculator

**M-**

Subtracts the displayed number from the memory of the calculator

**MRC**

Recalls and displays the number in memory

**MRC**

**MRC**

Clears the memory

# Adding Products with Memory

*What is the total of the three equations below?*

$$2 \times .86 = ?$$

$$3 \times 1.49 = ?$$

$$4 \times .52 = ?$$

Press these buttons:

ON/AC MRC MRC  
ON/AC

$$2 \times .86 =$$

M+

$$3 \times 1.49 =$$

M+

$$4 \times .52 =$$

M+

MRC

The calculator shows:

0.

1.98

MEMORY 1.98

MEMORY 4.47

MEMORY 4.47.

MEMORY 2.08

MEMORY 2.08

MEMORY 8.53

## Find the Total Cost Using Memory

**3 \$5 Items**  
**6 \$2 Items**  
**\$13 Discount = ?**

Press these buttons:

**ON/AC** **MRC** **MRC**

**ON/AC**

**3** **x** **5** **=**

**M+**

**6** **x** **2** **=**

**M+**

**MRC**

**-** **13** **=**

The calculator shows:

**0.**

**15.**

**MEMORY 15**

**MEMORY 12**

**MEMORY 12**

**MEMORY 27**

**MEMORY 14**



## Million Memory Magic

Use the Memory function to quickly divide 1,000,000 by 1 through 10. Enter 1,000,000 into memory. Use the MRC key to recall the 1,000,000 value instead of re-entering 1,000,000 for each equation.

$$1,000,000 \div 1 =$$

$$1,000,000 \div 2 =$$

$$1,000,000 \div 3 =$$

$$1,000,000 \div 4 =$$

$$1,000,000 \div 5 =$$

$$1,000,000 \div 6 =$$

$$1,000,000 \div 7 =$$

$$1,000,000 \div 8 =$$

$$1,000,000 \div 9 =$$

$$1,000,000 \div 10 =$$

## Lesson 11: Percents

|                   |   |
|-------------------|---|
| Overview          | Use the calculator for situations involving sales taxes, discounts, or other percent problems.  |
| Teacher Materials | “Percents” and “More Percents” transparencies.  |
| Student Materials | Pencil, Calculator, and “Would You Like To Own an Amusement Park?” worksheet.   |
| Keys Introduced   | $\boxed{\%}$  |
| Teaching Notes    | <p>Remember the <math>\boxed{\%}</math> key acts like the <math>\boxed{=}</math> key so <math>\boxed{=}</math> does not need to be pressed at any point when doing percents</p> <p>For the game where the students have to make up an Amusement Park and have to figure out what the discounted price with tax will be, is a way for the students to look at a real life situation. They use their new knowledge of percents to figure out the discounts that they one day might be using and then they will know how much money they are saving.</p> |

## Percents

**\$3.70 - 12% discount =?**  
**\$7.50 + 6% sales tax = ?**

Press these buttons:

3.70

12

-----

7.50

6

The calculator shows:

0.

3.70

3.256

-----

7.50

7.95

## More Percents

**\$4.90 - 15% discount=?**  
**\$8.20 + 7% sales tax**

Press these buttons:

ON/AC ON/AC

4.90  $\square$  -

15  $\square$  %

-----

8.20  $\square$  +

7  $\square$  %

The calculator shows:

0.

4.90

4.165

-----

8.20

8.774

**Would you like to own an Amusement Park?  
Decide what rides to offer and set the ticket price for  
each ride. Offer a 10% discount. Use 5% for the Tax  
rate and calculate the final price.**

\_\_\_\_\_ 's Park

|                       |                |  |  |  |
|-----------------------|----------------|--|--|--|
| Name of Ride          | <i>Twister</i> |  |  |  |
| Original Cost of Ride | <i>\$10.00</i> |  |  |  |
| % discount            | <i>10%</i>     |  |  |  |
| Sale Price            | <i>\$9.00</i>  |  |  |  |
| Sales Tax %           | <i>5%</i>      |  |  |  |
| Final Cost            | <i>\$9.45</i>  |  |  |  |

## **Lesson 12: Interest**

|                   |   |
|-------------------|---|
| Overview          | Use the % key to determine interest amounts for a loan.   |
| Teacher Materials | “Simple Interest” and “Total with Interest” transparencies.   |
| Student Materials | Pencil, Calculator, and “Interesting Ride” worksheet.   |
| Keys Introduced   | <input type="text" value="%"/>  |
| Teaching Notes    | <p>Remember the <input type="text" value="%"/> key acts like the <input type="text" value="="/> key so <input type="text" value="="/> does not need to be pressed at any point when doing percents</p> <p>The worksheet “Interesting Ride” is fun and interesting to students. Word problems that portray real life situations can better focus the mind and show how interest will one day affect the student.</p> |

# Simple Interest

**\$750.00 at 13% =?**

**\$299.00 at 3% =?**

**Press these buttons:**

**ON/AC** **ON/AC**

**750** **x**

**13** **%**

-----

**299** **x**

**3** **%**

**The calculator shows:**

**0.**

**750.**

**97.5**

-----

**299.**

**8.97**

## Total with Interest

$$\$490 + 15\% = ?$$

$$\$820 + 7\% = ?$$

Press these buttons:

ON/AC ON/AC

490 +

15 %

-----

820 +

7 %

The calculator shows:

0.

490.

563.5

-----

820.

877.4




# INTERESTing Ride

**Hop aboard and get ready for the INTERESTing ride!!**

Below are a few problems that are fun. Come along and enjoy the ride.

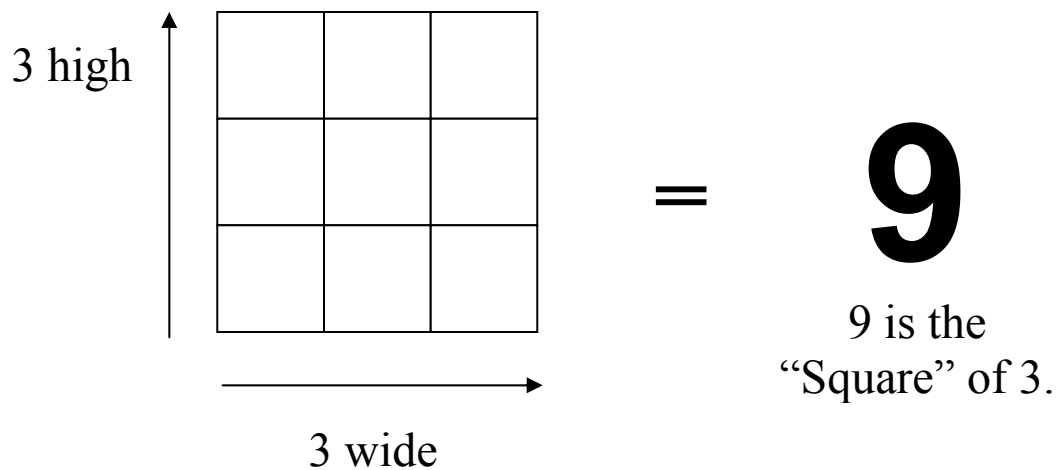
- ☺ Mr. Bob has a piggy bank that has \$300.00 in it. The piggy pays Mr. Bob 3% per year. How much interest will piggy pay Mr. Bob in the first year?
  
- ☺ Mrs. Bob has a jar full of \$3,500.00 all in pennies that is 350,000 pennies. Every year the jar pays Mrs. Bob 9% interest. How much money will the jar pay Mrs. Bob at the end of the year?
  
- ☺ Mr. and Mrs. Bob have a bank account for Little Bob their son. At the start of the year, they put a deposit of \$2,500.00. The bank pays a yearly interest of 6%. How much will Mr. and Mrs. Bob have at the end of the year?
  
- ☺ Sam, Little Bob's friend asks Little Bob for \$50 to buy ice cream for a month. Little Bob is smart and gives Sam the money with a fee of 2% interest. How much money total will Sam have to pay Little Bob at the end of the month?
  
- ☺ Mr. Smith works with Mr. Bob, and they both need lunch, but Mr. Bob does not have money with him. Mr. Smith pays \$15 for Mr. Bob's lunch and says to pay him back in 4 days with 2% interest for everyday until he pays. How much money will Mr. Bob have to pay Mr. Smith total in 4 days?

## Lesson 13: Square Roots and Squares

|                   |  |
|-------------------|--|
| Overview          | Use the calculator to determine the square and square root of numbers.   |
| Teacher Materials | “Why Call it the “Square”, “Square Roots”, and “Squares” transparencies.   |
| Student Materials | Crayons, Calculator, and “Square Grid” worksheet.  |
| Keys Introduced   |   |
| Teaching Notes    | <p>Remember to explain that Square roots and Squares are inverses of each other.</p> <p>Write the following equation on the board:</p> $10 \times 10 = 100$ <p>Show how 100 is the square of 10. Explain that 10 is the square root of 100.</p> <p>Provide copies of the “Square Grid” worksheet to students. Ask the students to draw colored boxes representing the Square of 1, 2, and 4.</p> |

## Why Call it the “Square”?

When small squares are used to make a larger square you can see why we use the term “Square”.



3 is the “Square Root” of 9.

# Square Roots

$$\sqrt{121} = ?$$

$$\sqrt{225} = ?$$

$$\sqrt{36} = ?$$

Press these buttons:

**ON/AC** **ON/AC**

**121**  $\sqrt{\quad}$

-----

**225**  $\sqrt{\quad}$

-----

**36**  $\sqrt{\quad}$

The calculator shows:

**0.**

**11.**

-----

**15.**

-----

**6.**

# Squares

$$12^2 = ?$$
$$4^2 = ?$$

Press these buttons:

ON/AC ON/AC

12 x 12

-----

4 x 4

The calculator shows:

0.

144.

-----

16.

# Square Grid

