

Unit 4: Lesson 11 – Percentage Contexts

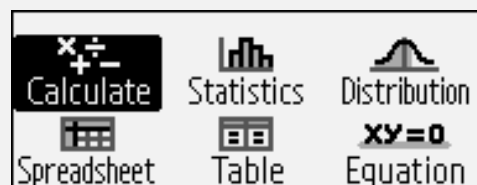
Activity 11.3: A Car Dealership

Skill: Use of the Ans key and % from the catalog within the Calculate app.

Activity Summary:

In this activity, students will apply their knowledge of percent increase and decrease to real-world scenarios of markup and markdown. A key learning point is recognizing that a 32% increase followed by a 10% decrease on the new value does not equate to a simple 22% increase on the original amount. Percent calculations can be performed in the Calculate app of the calculator either converting to a decimal or utilizing the % key. The Answer key automatically uses the prior result in a new calculation.

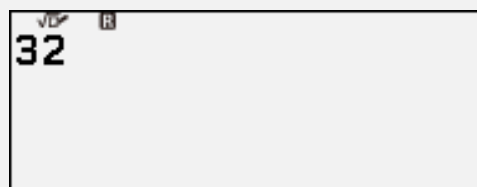
1. Press **Ⓐ** – **Home** and then use the **arrow keys** to highlight the **Calculate app** in the top left corner.



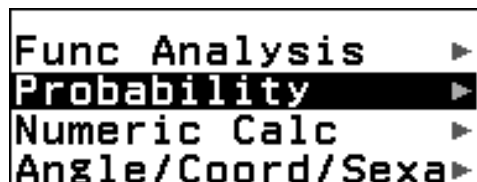
2. Press either **OK** or **EXE** to open the **Calculate app**. To find the **mark-up** of the vehicle, the **wholesale price** needs to be **multiplied** by the **percent mark-up**.



3. In the first part of the task, we are asked to find the 32% mark-up amount on a \$12000 vehicle. One way to complete this task is to use the **% symbol** from the **Catalog**. Type in **32**.



4. To add the **% symbol**, press **Ⓐ** – **Catalog** to start. Press the **down arrow**, **▽**, to highlight **Probability**.



5. Press either **➤**, **OK**, or **EXE** to go to the next menu. The **% symbol** is at the top of this menu and is already highlighted.



<p>6. Press either OK or EXE to add the % to your expression.</p>	
<p>7. Finish the calculation by entering × 1 2 0 0 0 followed by either OK or EXE. The mark-up of the vehicle is \$3,840.</p>	
<p>8. To find the retail price of the car, add the mark-up amount to the wholesale price of the car. When leading with an operation, the calculator will automatically insert Ans. Enter + 1 2 0 0 0 followed by either OK or EXE. The retail price of the car is \$15,840.</p>	
<p>9. Optional – Since the price of the car is in the thousands, the digit separator can be turned on to more easily view the thousands place. Press ≡ – Settings for Calc Settings. Then press either ➤, OK, or EXE followed by the up arrow, ▲ to highlight Digit Separator. Press either ➤, OK, or EXE. Press either OK or EXE to turn the Digit Separator on. The radio button in front of On will now be filled. Press the AC button to return to the Calculate app.</p>	
<p>10. The second task asks to find the sale price after a 10% discount. This can be directly computed by multiplying by 90%. 90% can be entered as an equivalent decimal, 0.9, as well. Type × . 9 followed by either OK or EXE. The cars sale price is \$14,256.</p>	
<p>11. To determine the new percent mark-up, divide the new sale price by the original wholesale price. Type ÷ 1 2 0 0 0 followed by either OK or EXE. If a fraction is displayed, use the ≡ – Format key to select Decimal. The new percent mark-up is 18.8%. Note that it is not just 32% - 10%.</p>	