Re: Decimal

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- *From*: Harlan Grove <hrlngrv@xxxxxxxxx>
- *Date*: Thu, 07 Jun 2007 01:23:24 −0700

"Rick Rothstein \(MVP − VB\)" wrote...

> I have used formating a cell using currency and making the
> decimal to Zero. in the cell the numbers are being displayed in
> whole numbers but the total of these numbers are not the correct
> total. It is even calculating the decimals and then rounding off

> The problem with formatting a cell is that it is only cosmetic;
> that is, it only changes the **display** of a value to match the
> format, but the original number remains as typed in behind the
> scenes. . . .

....

> I am newly returned to Excel after a lengthy absence from it, so
> the following may or may not be the best way for you to proceed

....

> You can use a worksheet Change event macro to physically change
> the typed in value by the user. . . .

....

Generally unwise. Better to leave entries as−is and transform the
entered values as needed in formulas.

> Private Sub Worksheet_Change(ByVal Target As Range)
> If Target.Column = 5 Then Target.Value = Int(Target.Value, "0")
> End Sub
>
> The above code will **truncate** away any decimal values typed by
> the user IN COLUMN 5; that is, column "E". . . .

....

Copy & paste is a killer! VBA's Int(..) function takes one and ONLY

one argument. The Int call above is a syntax error.

More precisely, Int(..) returns the nearest integer less than or equal to the original number. For positive numbers with fractional parts, that's truncation, e.g., Int(12.3) returns 12, but for negative numbers it's NOT truncation, as least not the way 99 out of 100 numeric programmers would define 'truncation', e.g., Int(−99.4) returns −100 rather than −99. Probably better to use Fix(..) rather than Int(..). See online VBA help for details.

But code isn't necessary. To sum a column of numbers rounded to integers, use

=SUMPRODUCT(ROUND(range,0))

To sum a column of numbers truncated to integers, use

=SUMPRODUCT(TRUNC(range))

and to sum using bankers rounding, use

=SUMPRODUCT(ROUND(range−(MOD(range*2,4)=1)/2,0))

.