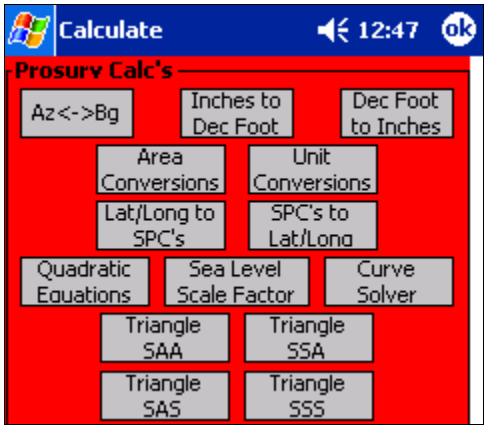
cEZ Conversions

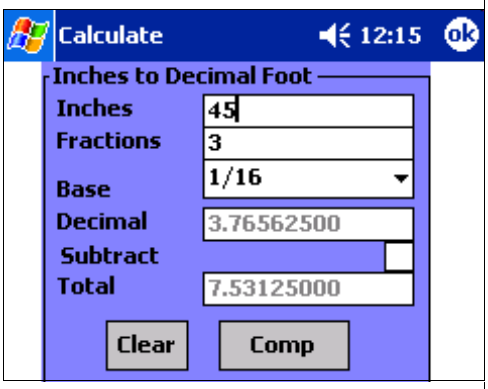


Prosurv cEZ Conversions has 14 functions as shown above.

Azimuth to Bearing

Enter an Azimuth and it's corresponding Bearing is computed and displayed. Note that many functions in Prosurv cEZ allow you to enter either an Azimuth or a Bearing.

Inches to Decimal Foot



This function makes quick work of having to add and subtract inches and fractions as found on Architect's drawings.

Enter the number of inches and fractions. Then select a base for the fraction from the list (1/2—>1/64).

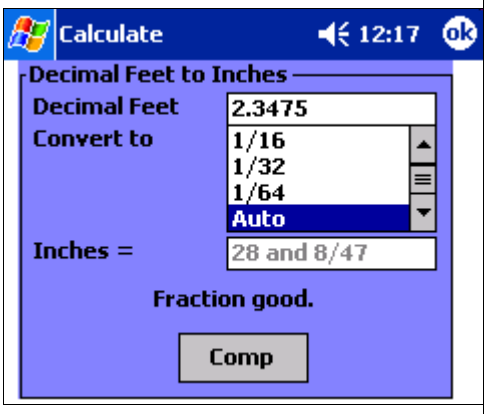
Tap the **Comp** button to compute the decimal equivalent. Each successive **Comp** adds (or subtracts) to/from the current total decimal amount.

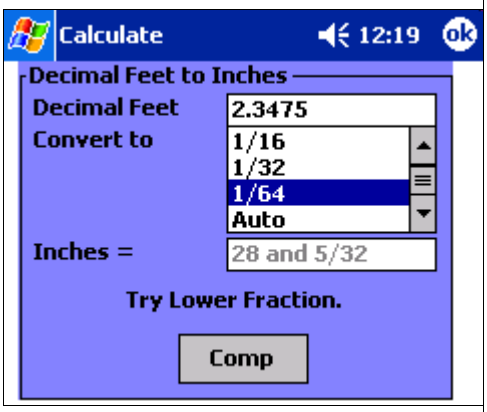
Decimal Feet to Inches

Enter an amount in Decimal Feet. Prosurv cEZ can convert the inches and fractions equivalent of the amount.

At first, you should select **Auto** for the fractional portion of the answer. Note here that the answer is 28 and 8/47.

You can then select a different denominator, such as 1/32. Prosurv cEZ may recommend trying a lower fraction if the computation isn't "perfect".

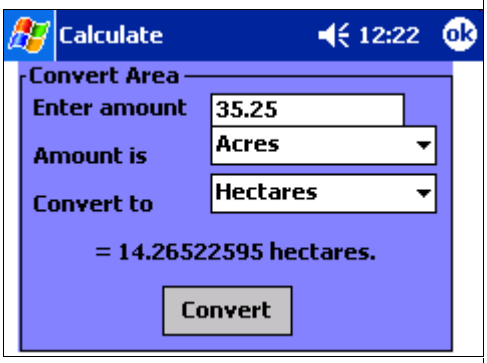




Area Conversions

Prosurv cEZ can convert areas between any of the following:

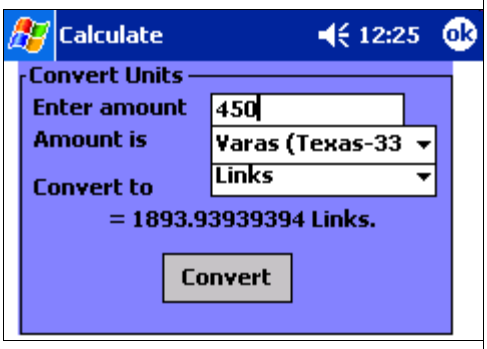
- Square Feet
- Acres
- Square Meters
- Hectares



Enter an amount of area to convert. Select what the amount "is" and what you want to convert "to". You can use any combination, such as from Square Meters to Acres.

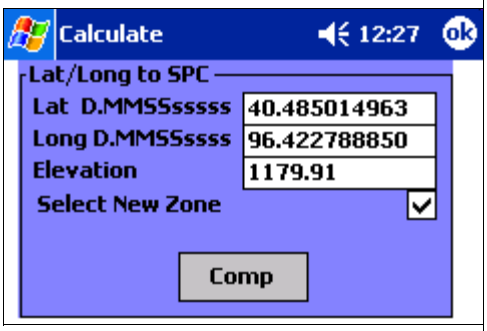
Unit Conversions

Prosurv cEZ has **9** different unit conversions. You can convert units in **any** combination of the 9 total units available. For example, you could go from **Texas Varas** directly to **Links!**

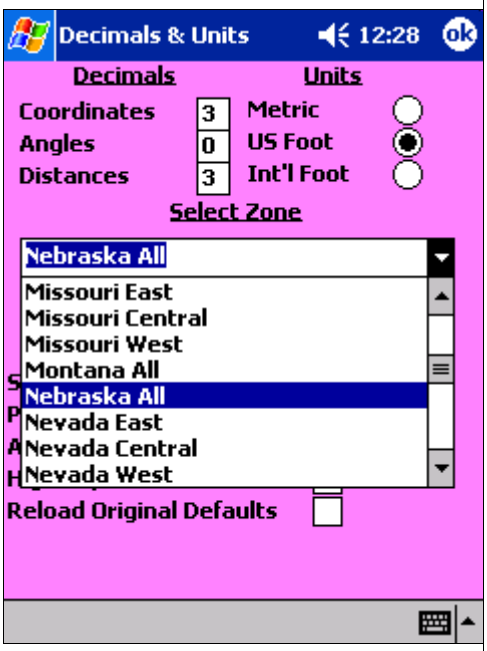


Lat/Long to SPC

If you've already selected a State Plane Coordinate **zone**, the zone will be displayed in the dialog. If you currently are not using a SPC zone, a dialog will pop up asking you to select a zone from the NAD83 list. Alternately, you can select a new zone by checking "Select new zone".



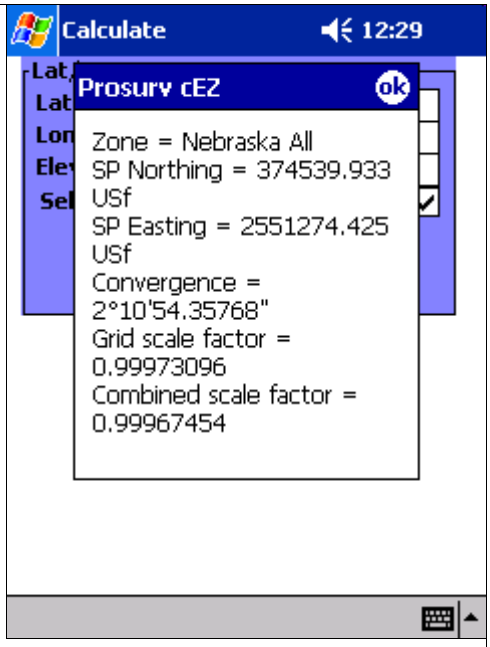
Simply enter the Latitude and Longitude in D.MMSSssssss format. If you enter an elevation, it will be used to compute a combined scale factor. Press Enter to compute the State Plane Coordinates.



The State Plane Coordinates of the Latitude and Longitude (NAD83) are displayed.

The Convergence, Grid Scale Factor, and Combined Scale Factor are also displayed.

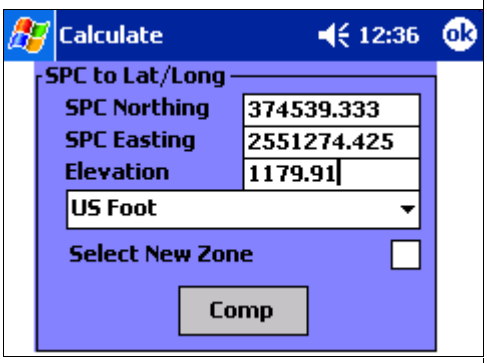
Your job is now set to use the Zone you selected, so be sure to uncheck the "Use SPC Zone" check box in Decimals and Units if you don't want to use SPC zones!



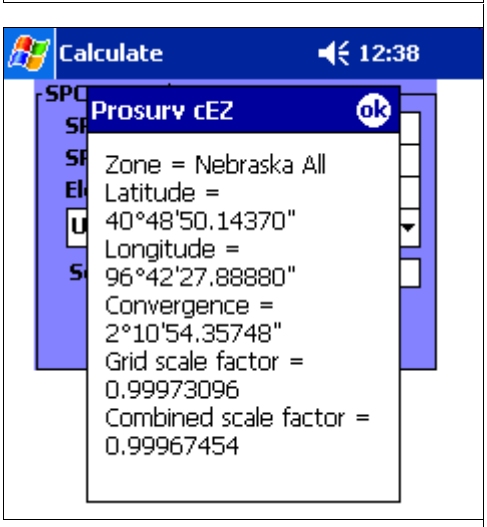
State Plane Coordintes to Latitude/Longitude

Enter an SPC coordinate pair and an elevation (if needed) to compute the Lat/Long. If you've already selected a Zone, then the computation is done immediately.

If you haven't selected a zone, you will be prompted to select one from the Decimals/Units drop down list.



Even if your job's in US Foot, you can enter the coordinates in metric, then select metric from the drop down. The Lat/Long will be converted and displayed.



Quadratic Equation Solver

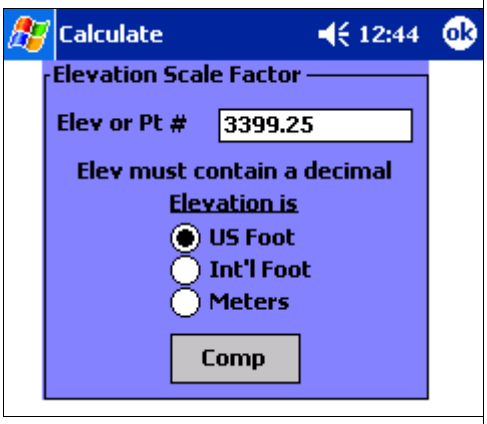
Prosurv cEZ will compute and display the X1, X2 answers for a quadratic equation. Enter the coefficients A, B, and C to compute the answers (if the solution is possible).

A quadratic equation is of the form: $y=Ax^2+Bx+C$

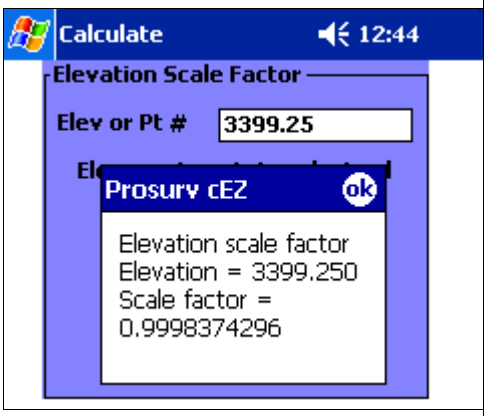
Sea Level (Elevation) Scale Factor

A combined scale factor, or csf (also known as a datum adjustment factor) is the result of multiplying the horizontal (grid) scale factor by the sea level scale factor.

This routine can compute the sea level scale factor of an entered elevation, or it can use the elevation of an existing point.



The elevation scale factor is computed and displayed.

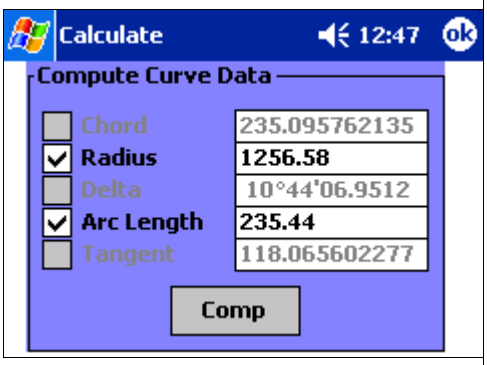


Curve Solver

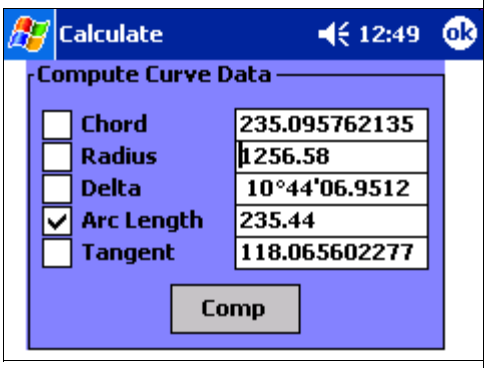
This **very handy** routine can solve 3 of 5 curve dimensions based on two given dimensions.

The two **checked** pieces of curve data are "held" to compute the other three.

The example shows the entry of a **Radius** amount and the **Arc Length.** The resulting Chord, Delta, and Tangent are computed and displayed.



Note that if we uncheck the **Radius**, then we're allowed to edit the contents of any of the other text boxes. Then we can check a different box to recompute the curve data based on your changes.



Prosurv cEZ Also Includes Four Triangle Solutions

- Side-Angle-Angle
- Side-Side-Angle
- Side-Angle-Side
- Side-Side-Side