Test Yourself

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Proportioning

Here are three proportioning problems. The first uses double proportioning to reestablish a lost interior corner to four sections. Double proportioning is applied when there are record and measured distances in each of four directions from a corner that now has been declared lost and must be reestablished. The application could be used in an urban subdivision, or, as in this case, the U.S. Public Land Survey System. The other two problems are both single proportion problems in urban subdivisions. The solution to these two illustrate a legal principle of proportioning in a subdivision. Do you recognize it?

In all three problems you must find the coordinates to reestablish a lost corner. There are two methods available: You may either proportion coordinates, or inverse between the coordinates given, then proportion along the "inversed" line. Which solution will be easier, quicker, more efficient and with fewer keystrokes? (Hint: If you are doing these problems on a standard calculator, you'll want to learn to proportion coordinates.)

In these sketches the dimensions given are record. The darkened circles represent found original survey markers. The coordinates given (north over east) are your measured coordinates in feet for the found original corners.

For answers to these problems (and much more), please visit our website at: *www.TheAmericanSurveyor.com.*
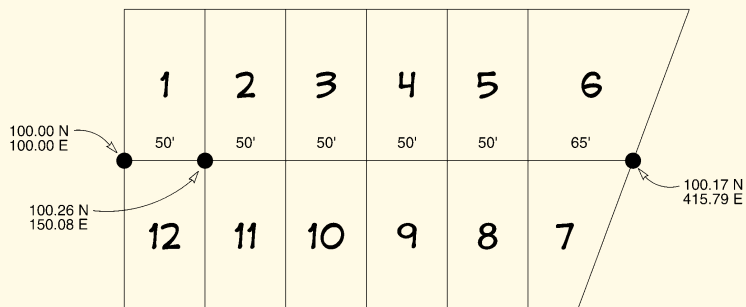Good luck!

For more information about the PLS exam and its contents, visit the NCEES website at www.ncees.com.

1. Compute the coordinate to reestablish the lost corner to sections 8, 9, 16 and 17.
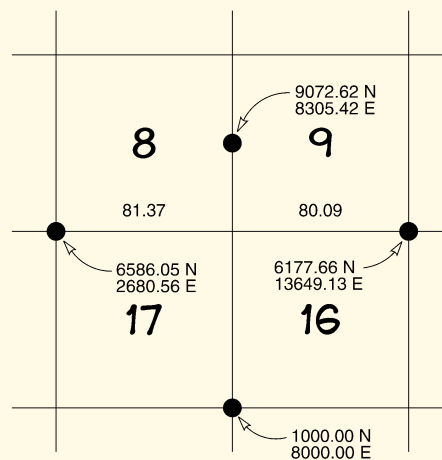
2. Compute the coordinate to reestablish the lost corner to lots 4, 5, 6 and 8.

3. Compute the coordinate to reestablish the lost northwest corner of Block 2.