Government Rectangular Survey System (GRSS) And Torrens System

Government Rectangular Survey System (GRSM)

• Land survey system primarily used throughout the US but not within the original 13 colonies which are based upon the Meters & Bounds Theory

• Based upon the longitude and latitude lines and then ultimately upon the meridian (vertical) and parallel (horizontal) lines

- The meridian and parallel lines are six miles apart and divide the area into a literal "checkerboard" consisting of areas (townships) that are 36 square miles

• **Township** – an area that is six miles squared and is divided into 36 one mile square increments (sections).

• **Section** – an area that is one mile squared and consists of 640 acres.

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Numerical layout of a typical Township

Quick Notes
HPW Real Estate School

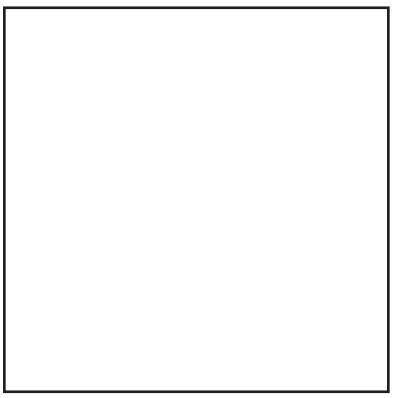
Identification of Tract

• Although it may appear confusing at first, remember everything is on a "checkerboard" type layout.

Learning Tip: It will be easier to do the problems by going right to left with the various fractions

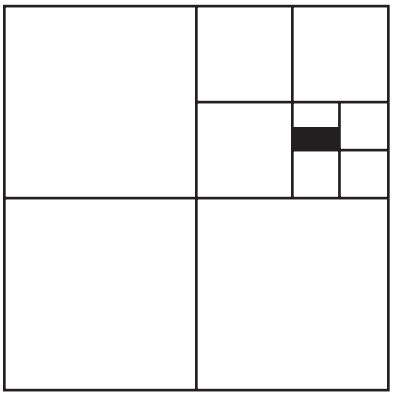
• Simply divide each section into ¼'s and then the applicable quarter should be further divided into ¼'s and so on

Practice Layout - Darken in the following:
S ½ of the NW ¼ of the SE ¼ of the NE ¼



Solution Path
• Divide into ¼ - identify the NE parcel
• Divide the NE ¼ into ¼'s – identify the SE parcel
• Divide the SE ¼ of the NE ¼ into ¼'s – identify the NW ¼
• Divide the NW ¼ of the SE ¼ of the NE ¼ into "North-South" halves
• Identify the S ½

Your completed diagram should look as follows:



Computation of Acreage

• Students should be prepared to calculate the acreage contained within a tract.

- **Example**: SW ¼ of the SE ¼ of the NW ¼

- **Solution**: The easiest way to calculate the acreage of a tract by using the GRSM is to simply multiply the denominator of the description and then divide that number into 640 (total acres in 1 sq. mile or section).

Hence, 4 x 4 x 4 = 64 | 640 / 64 = 10 acres

***Note**: there will be instances where the tract will be contained within two adjoining sections. In such cases, the description will join the various sections by the word "and" (i.e. The E ½ of the NE ¼ of the SE ¼ of section 15 **and** the W ½ of the NW ¼ of the SW ¼ of section 14).*

Section 15: 2 x 4 x 4 = 32
640 / 32 = 20 acres

Section 14: 2 x 4 x 4 = 32
640 / 32 = 20 acres

20 + 20 = 40 acres total in tract

Torrens System

• Does have some limited implementations in North Carolina

• Similar to a car title in that it shows evidence of title as well as any liens

• Eliminates the necessity of creating a chain of title

• Land registered under the Torrens System cannot later be claimed by rights of adverse possession

• Transfer of land must be identical to the old transfer except in name of the new owner

• Typical example of where the Torrens System would be used in NC would be with a rather large tract, perhaps consisting of hundreds of acres, of timber land in the eastern part of the state. Because the owner doesn't live on the land, or perhaps even in NC, he may wish to register this land under the Torrens System to protect himself from adverse possession claims of third parties.