

SECTION IV.

EXERCISES IN GEOMETRY AND MENSURATION.



1. Show what is meant by *space*.
2. Define *matter* ; *body* ; *solid* or *volume*.
3. Define *surface* ; *line* ; *point*.
4. How many dimensions has a volume ? a surface ? a line ? a point ?
5. Represent a straight line. Observe its direction and its distance between two points. Define *straight line*.
6. Represent a curved line. Observe its direction. Define *curved line*.
7. Define *vertical line* ; *horizontal line* ; *inclined line*. Give examples.
8. When are lines *parallel* ? When is a line *perpendicular* to another ? When is a line *oblique* to another ? Give examples of each.
9. Draw free-hand as nearly as you can two horizontal lines that are parallel ; two curved lines that are parallel ; a line that is perpendicular to a vertical line ; a line that is perpendicular to an inclined line ; a line that is oblique to an inclined line.
10. Can you make, by means of rule and compasses, lines that are exactly parallel ?
11. Can you divide a line into two equal parts ?
12. Can you divide a line into three equal parts ? any number of equal parts ?
13. Name some units of length. Define unit of length.
14. What is the standard unit of length in this country ? How determined ? What is the standard unit of length in the metric system ? How determined ?