





BASIC SURFACES FOR ENGINEERING

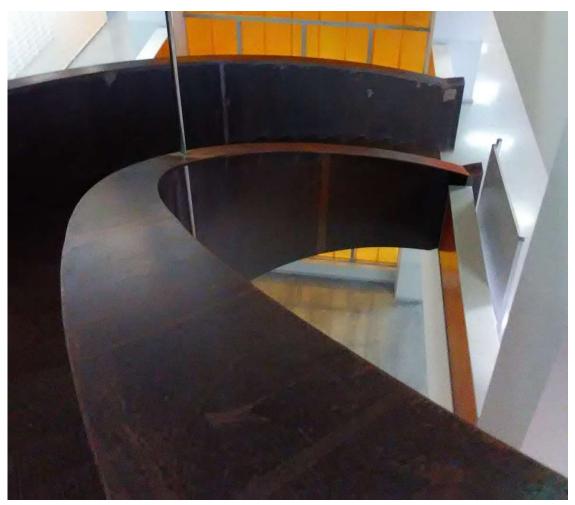


Figure 00. Main stairs of Engineering School of Bilbao II. Picture made by the authors, 2018.

3. Test of flat sections of surfaces







Instructions

The questions presented are multiple choice questions, with only one correct answer.

The solutions are at the end of the document.











Flat section test of surfaces

- 1. Generally speaking, what geometric shape results when a pyramid is cut through a plane?
 - a. Two straight lines
 - b. A closed polygon
 - c. One circumference
 - d. A conical curve
- 2. Generally speaking, what geometric shape results when a cone is cut through a plane?
 - a. Two straight lines
 - b. A closed polygon
 - c. One circumference
 - d. A conical curve
- 3. Generally speaking, what geometric shape results when a sphere is cut through a plane?
 - a. Two straight lines
 - b. A closed polygon
 - c. One circumference
 - d. A conical curve
- 4. What geometric shape results when a pyramid is cut through a plane passing through its vertex?
 - a. Two straight lines
 - b. A closed polygon
 - c. One circumference
 - d. A conical curve







- 5. What geometric shape results when a cone is cut through a plane that passes through its vertex?
 - a. Two straight lines
 - b. A closed polygon
 - c. One circumference
 - d. A conical curve
- 6. What geometric shape results when a cylinder is cut through a plane parallel to the directrix?
 - a. Two straight lines
 - b. A closed polygon
 - c. One circumference
 - d. A conical curve
- 7. What geometric shape results from cutting a cone through a plane that cuts all the guidelines?
 - a. An ellipse
 - b. A parable
 - c. An hyperbola
 - d. Two straight lines
- 8. What geometric shape results when a cone is cut through a plane parallel to a guideline?
 - a. An ellipse
 - b. A parable
 - c. An hyperbola
 - d. Two straight lines
- 9. The shape of the sections resulting from cutting a prism through two planes parallel one to each other are:
 - a. Same
 - b. Different
 - c. Homotheticals
 - d. Related













- 10. What shape does it result in when a convex cylinder is cut through a straight line?
 - a. One point
 - b. Two points
 - c. A straight line
 - d. Two straight lines





Solutions for flat surface section testing

1b, 2d, 3c, 4a, 5a, 6a, 7a, 8b, 9a, 10b





