

PARALLELEPIPED

it will be modified a bit by air resistance). The cross section of a telescopic mirror is a parabola. The telescopic mirror constitutes a surface known as a paraboloid, which is formed by rotating a parabola about its axis. When parallel light rays from a distant star strike the paraboloid, they are all reflected back to the focal point. (See optics.) For the same reason, the network microphones that pick up field noises at televised football games are shaped like paraboloids. Probably the largest parabola in practical use is the cross section of the 1000-foot-wide radio telescope carved out of the ground at Arecibo, Puerto Rico. The parabola is an example of a more general class of curves known as conic sections.

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PARABOLOID A paraboloid is a surface that is formed by rotating a parabola about its axis. (See parabola.)

PARALLEL Two lines are parallel if they are in the same plane but never intersect. In figure 87 lines AB and CD are parallel. A postulate of Euclidian geometry states that "Through any point not on a line there is one and only one line that is parallel to the first line."

Two planes are parallel if they never intersect.

PARALLELEPIPED A parallelepiped is a solid figure with six faces such that the planes containing two opposite faces are parallel. (See figure 88.) Each face is a parallelogram.

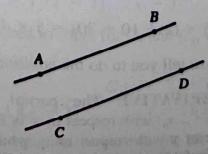


Figure 87 Parallel lines

