

SPHERICAL MIRROR

1800

The first part of the book is devoted to the theory of the spherical mirror. It begins with a discussion of the geometry of the sphere and the properties of the great circles. The author then proceeds to a detailed treatment of the reflection of light at a spherical surface, showing how the focal length of the mirror depends on its radius of curvature. This section is followed by a chapter on the formation of images by spherical mirrors, where the author derives the mirror equation and discusses the conditions under which real and virtual images are formed.

The second part of the book is devoted to the theory of the spherical lens. It begins with a discussion of the geometry of the sphere and the properties of the great circles. The author then proceeds to a detailed treatment of the refraction of light at a spherical surface, showing how the focal length of the lens depends on its radius of curvature and the refractive index of the material. This section is followed by a chapter on the formation of images by spherical lenses, where the author derives the lens equation and discusses the conditions under which real and virtual images are formed.

The third part of the book is devoted to the theory of the spherical telescope. It begins with a discussion of the geometry of the sphere and the properties of the great circles. The author then proceeds to a detailed treatment of the combination of two spherical lenses to form a telescope, showing how the magnifying power of the telescope depends on the focal lengths of the lenses. This section is followed by a chapter on the formation of images by a spherical telescope, where the author discusses the conditions under which a clear image is formed.

The fourth part of the book is devoted to the theory of the spherical microscope. It begins with a discussion of the geometry of the sphere and the properties of the great circles. The author then proceeds to a detailed treatment of the combination of two spherical lenses to form a microscope, showing how the magnifying power of the microscope depends on the focal lengths of the lenses. This section is followed by a chapter on the formation of images by a spherical microscope, where the author discusses the conditions under which a clear image is formed.

The fifth part of the book is devoted to the theory of the spherical camera. It begins with a discussion of the geometry of the sphere and the properties of the great circles. The author then proceeds to a detailed treatment of the formation of images by a spherical camera, showing how the size and position of the image depend on the focal length of the camera lens and the distance of the object. This section is followed by a chapter on the formation of images by a spherical camera, where the author discusses the conditions under which a clear image is formed.

The sixth part of the book is devoted to the theory of the spherical telescope. It begins with a discussion of the geometry of the sphere and the properties of the great circles. The author then proceeds to a detailed treatment of the combination of two spherical lenses to form a telescope, showing how the magnifying power of the telescope depends on the focal lengths of the lenses. This section is followed by a chapter on the formation of images by a spherical telescope, where the author discusses the conditions under which a clear image is formed.

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The eighth part of the book is devoted to the theory of the spherical camera. It begins with a discussion of the geometry of the sphere and the properties of the great circles. The author then proceeds to a detailed treatment of the formation of images by a spherical camera, showing how the size and position of the image depend on the focal length of the camera lens and the distance of the object. This section is followed by a chapter on the formation of images by a spherical camera, where the author discusses the conditions under which a clear image is formed.