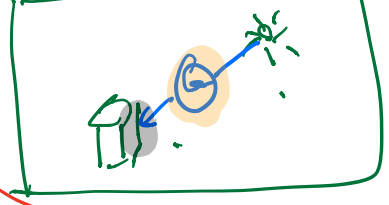
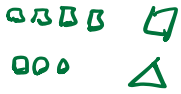
· Computer Graphics

- Modeling
  - 2D
  - 3D
- Rendering
  - local rendering
  - global rendering

모델링 ← 데이터 자료구조



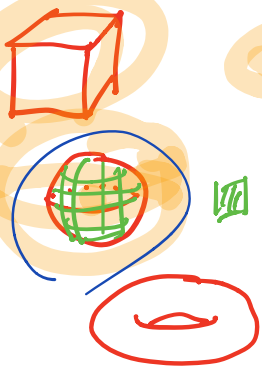


① 3차원 물체.

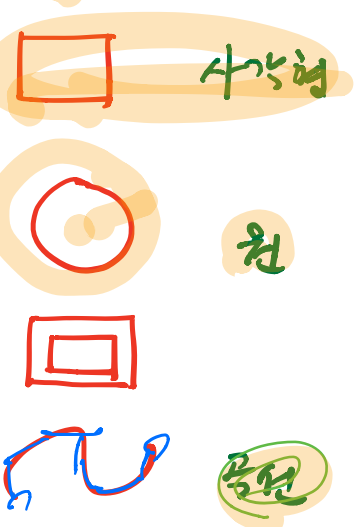
- 정육면체.
- 구(sheme)
- 도너츠 (Torus)
- 곡면 (surface)

실린더

3D



2D



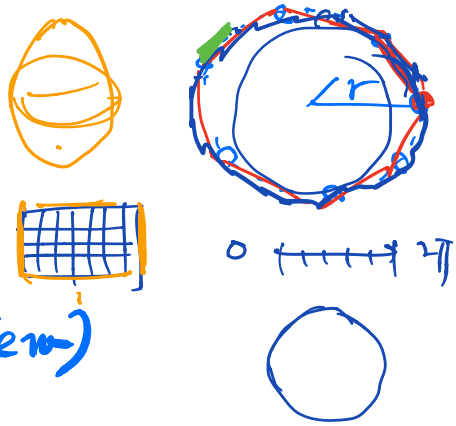
사각형

원

곡선

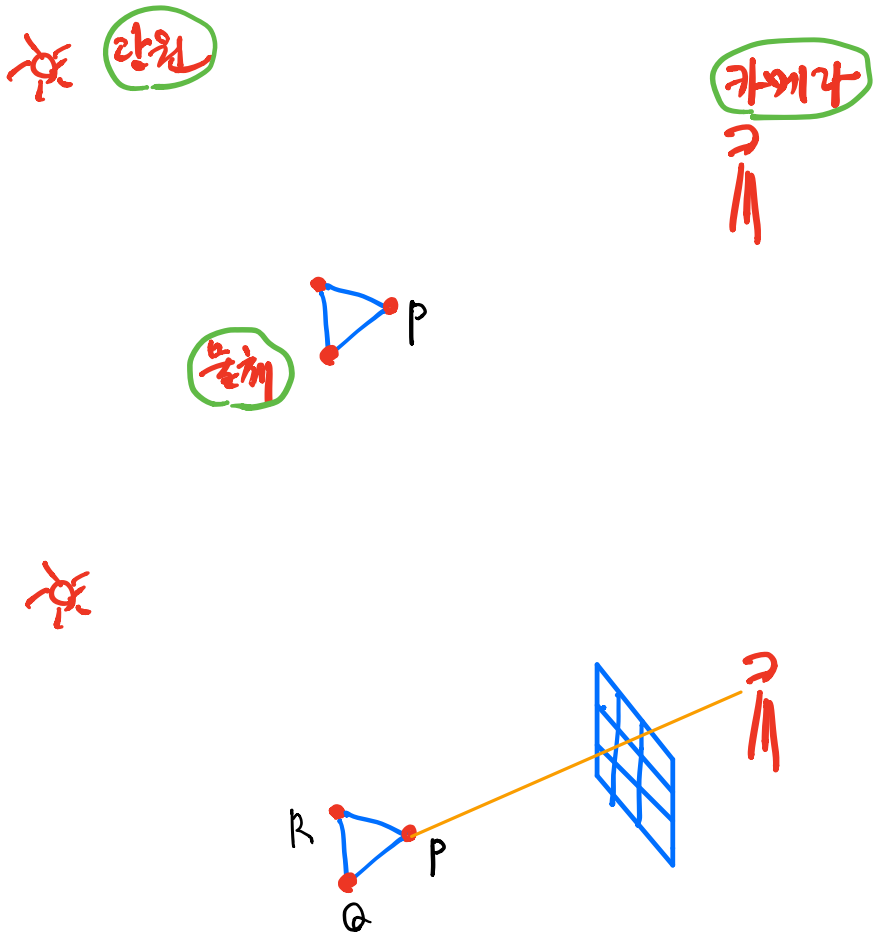
- 물 (water)
- 불 (fire)
- 파티클 시스템 (particle system)

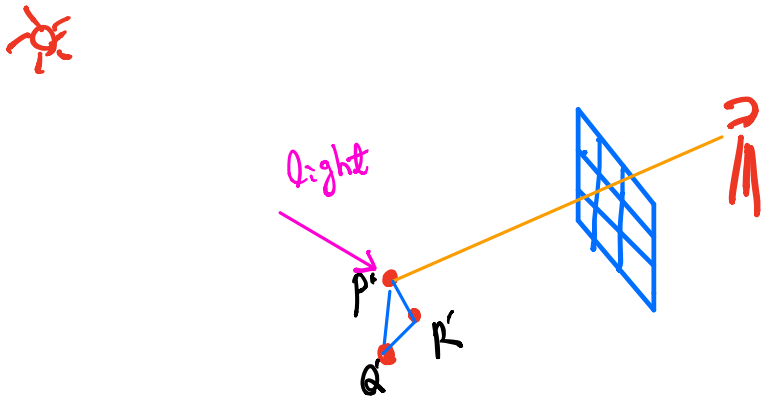
비, 눈, 불꽃, 폭발, ...

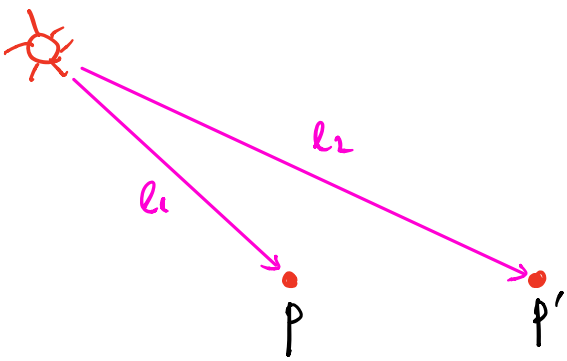


② 렌더링.

- 빛 처리에 따른 생성 처리


광원
카메라
물체
P
광원
R
P
Q





각 지점에 도달하는 빛의 양이 동일할까?

⊙ 질문 : Lighting (조명처리)을 어떻게 모델링할까?

⇒ phong shading Model.

P = 주변광 반사 + 확산반사 + 정반사.
(ambient) (diffuse) (specular)

= + +

동일한 방향의 세 종류의 빛 반사.