

Exam Answers:

1. C
2. A
3. D
4. B
5. B
6. C
7. B
8. D
9. D
10. D
11. C
12. C
13. B
14. C
15. B
16. A
17. B
18. B
19. B
20. D
21. C
22. A
23. B
24. C
25. C
26. B
27. C
28. B
29. A
30. B
31. D
32. A
33. D
34. C
35. D

In-class quiz answers:

1. B
2. D
3. C

4. E
5. E
6. B
7. E
8. A
9. D
10. D

Notes from class:

- There is more spreading as focal length increases
- To fix spherical aberration you need to make a parabolic surface
- If you were to put a light at the focal point, the light will reflect off the mirror and go out parallel from that
- Planoconvex \rightarrow plane on one side and convex on other, still converging
- In order to have more dispersion you need to increase the index of refraction
- Same index of refraction of the material you're in and that means you're invisible
- Fresnel lens \rightarrow concentric grooves, overhead projectors, light houses –important because they are a lighter type of lens
- If the object is between the focal point and the center of curvature of a concave spherical mirror, then the image is on the same side of the mirror, real image, and is larger
- If the object is on the center of curvature of a concave spherical mirror, then the image is a real image, same size, and inverted
- From: $1/f = 1/p + 1/q$ know: that if f is constant, then p and q will change inversely
- Convex lens and the light converges