Kevin Keating

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PhysicsII-(PHYS102-11R-B1-201320)

**Experiment: Mirrors**

**Introduction:**

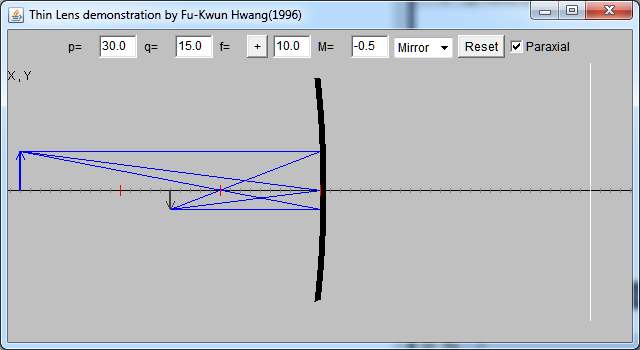
**Procedure:**

**Data and Observations:**

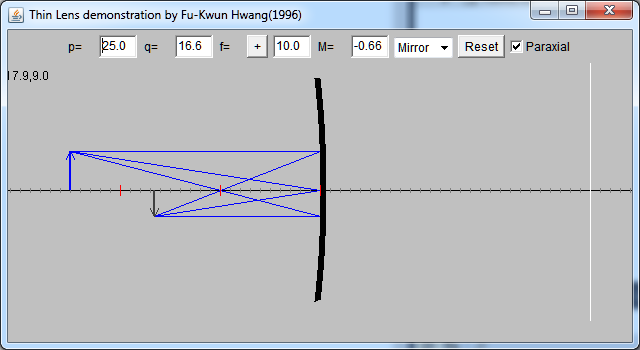
**Converging Mirror:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Converging Mirror** | |  |  |  |
| **p** | **q** | **f** | **M** | **image** |
| **30** | **15** | **10** | **-0.5** | **real** |
| **25** | **16.6** | **10** | **-0.66** | **real** |
| **20** | **20** | **10** | **-1** | **real** |
| **15** | **30** | **10** | **-2** | **real** |
| **10** | **∞** | **10** | **-100** | **real** |
| **5** | **-10** | **10** | **2** | **virtual** |

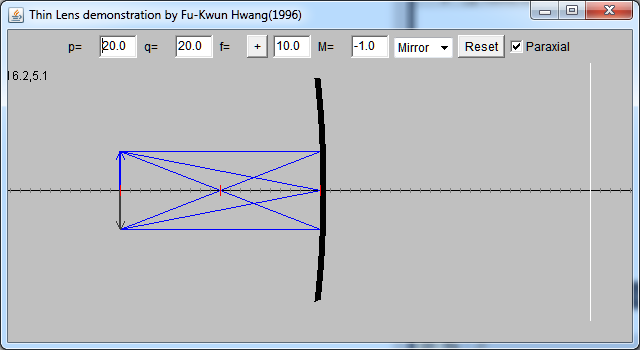
**p=30.0**



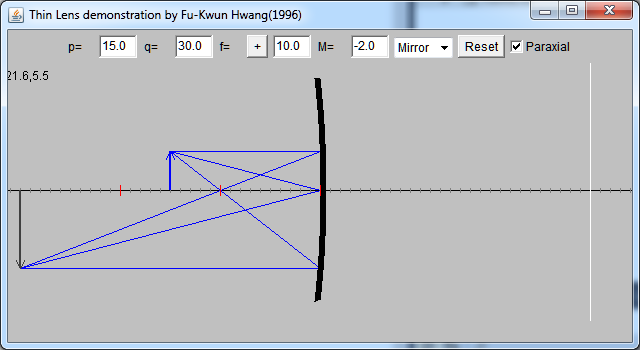
**p=25.0**



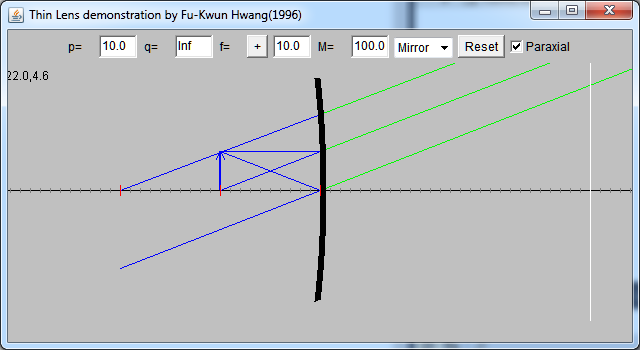
**p=20.0**



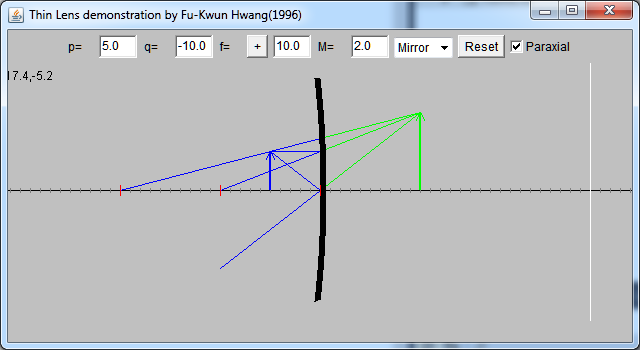
**p=15.0**



**p=10.0**



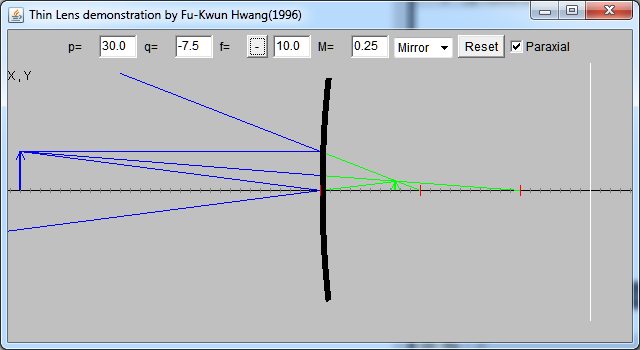
**p= 5.0**



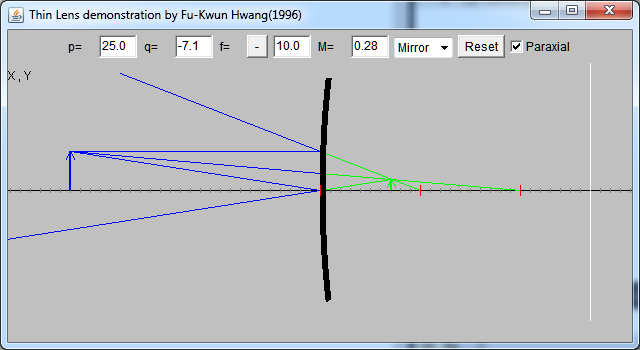
**Diverging Mirror**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Diverging Mirror** | |  |  |  |
| **p** | **q** | **f** | **M** | **image** |
| **30** | **-7.5** | **10** | **0.25** | **virtual** |
| **25** | **-7.1** | **10** | **0.28** | **virtual** |
| **20** | **-0.66** | **10** | **0.33** | **virtual** |
| **15** | **-6** | **10** | **0.4** | **virtual** |
| **10** | **-5** | **10** | **0.5** | **virtual** |
| **5** | **-3.3** | **10** | **0.66** | **virtual** |

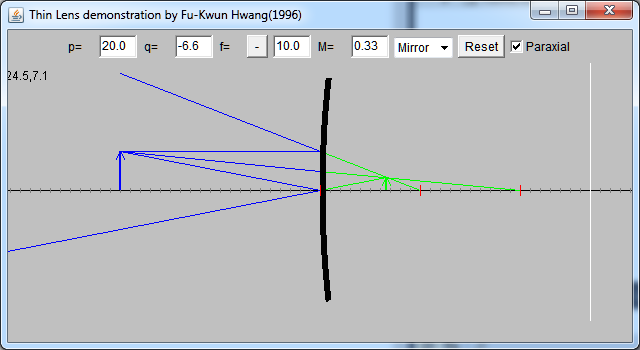
**p= 30.0**



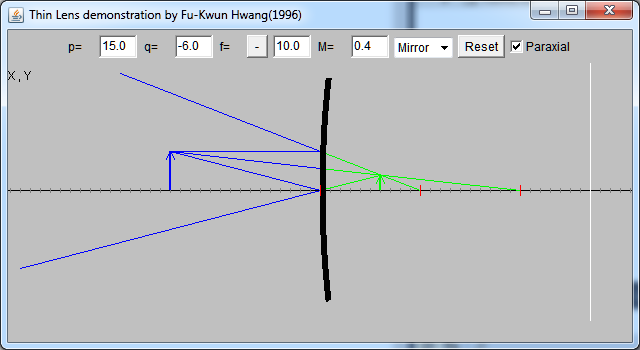
**p= 25.0**



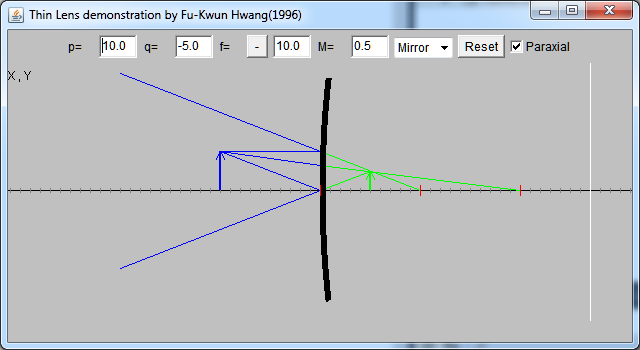
**p= 20.0**



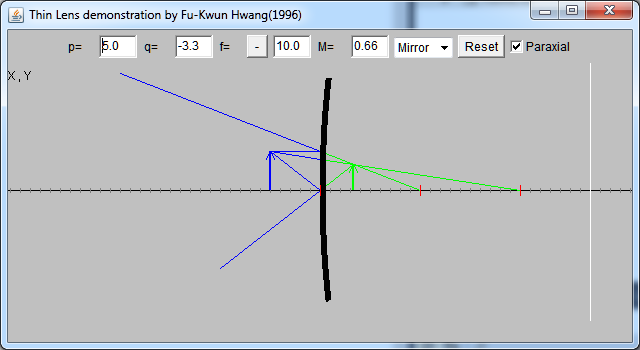
**p= 15.0**



**p= 10.0**



**p= 5.0**



**Conclusions:**