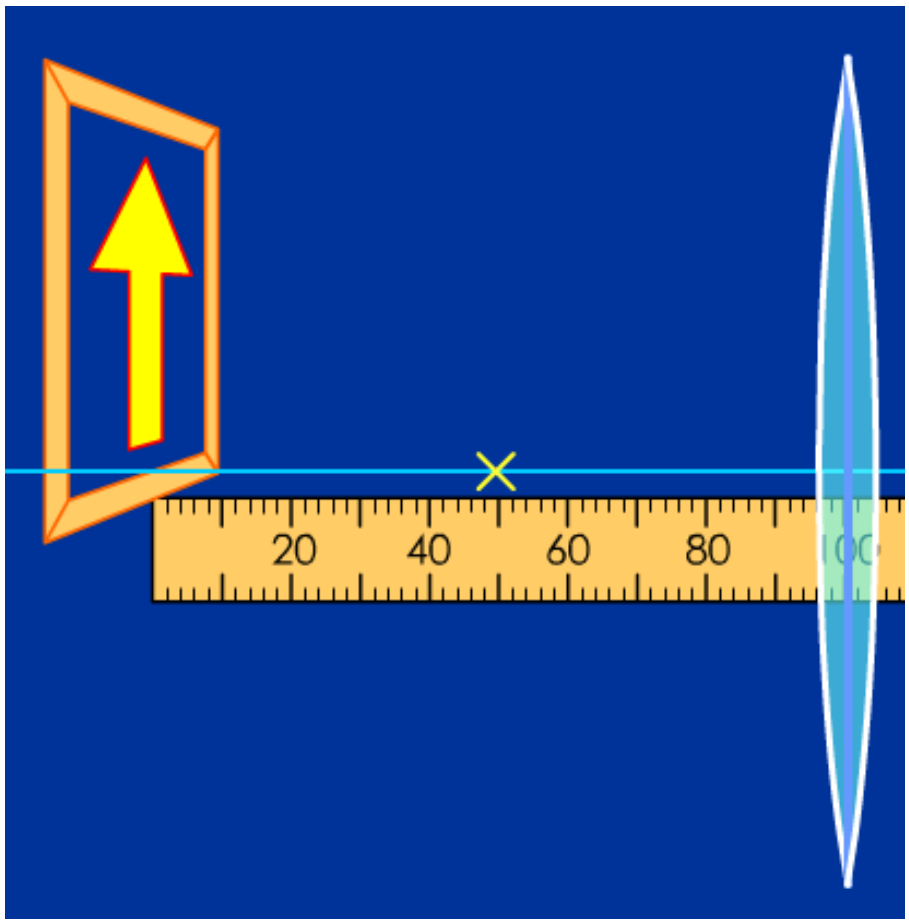
Reflection and Lenses

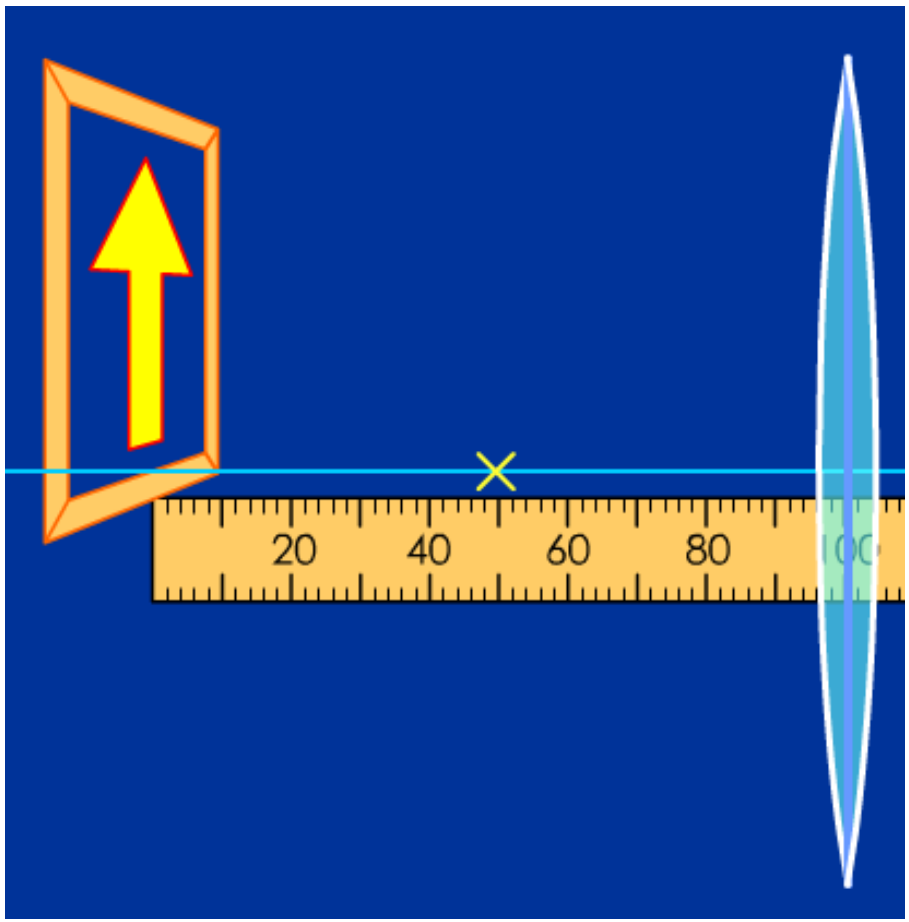
Plane mirrors only

Where will the image appear?



A. On the left, at the zero mark.
B. On the right, at the 150 mark.
C. On the right, at the 200 mark.
D. On the right, at the 300 mark.

How will the image look?



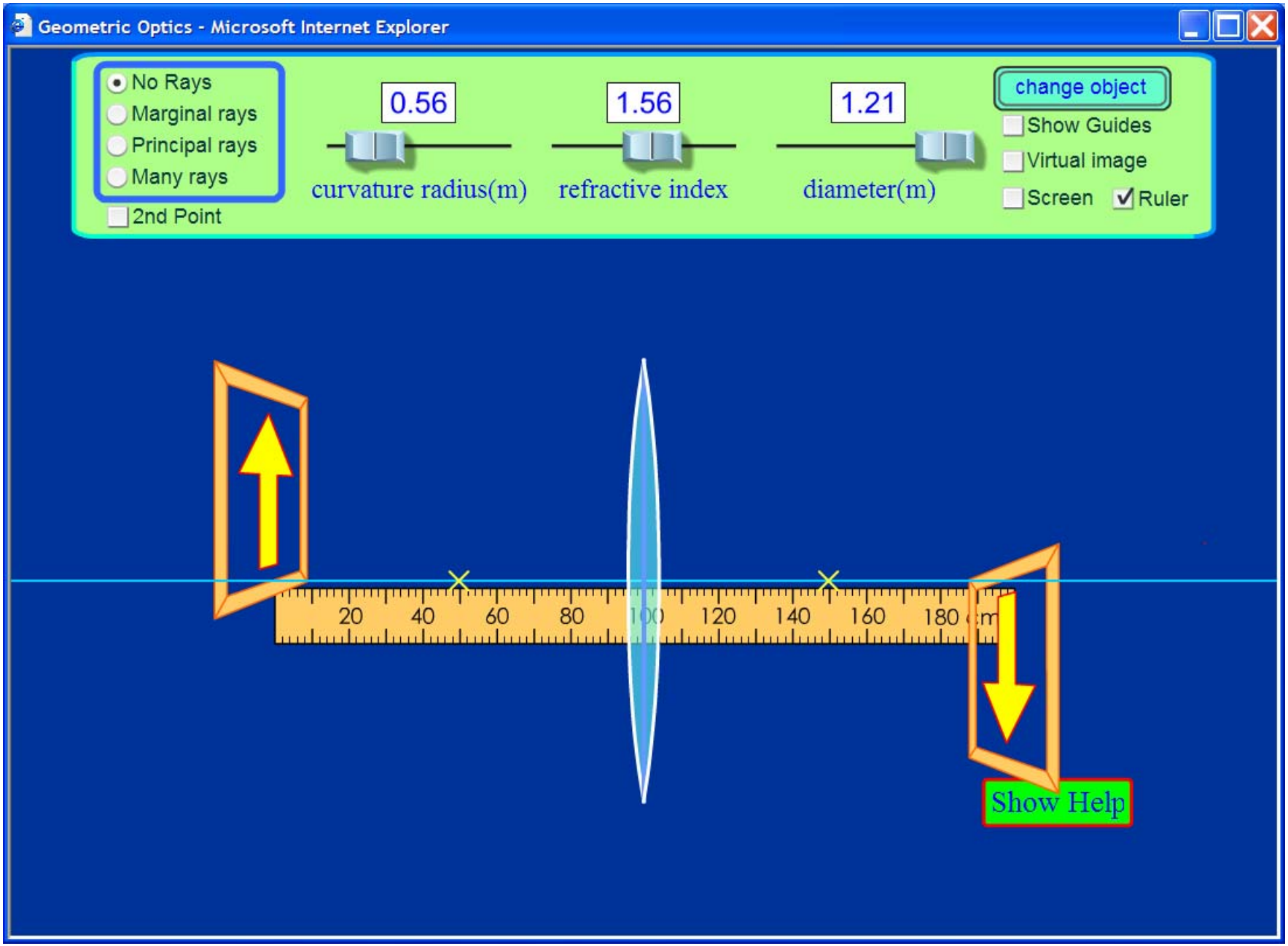
A. Same size ⇧

B. Smaller ⇧

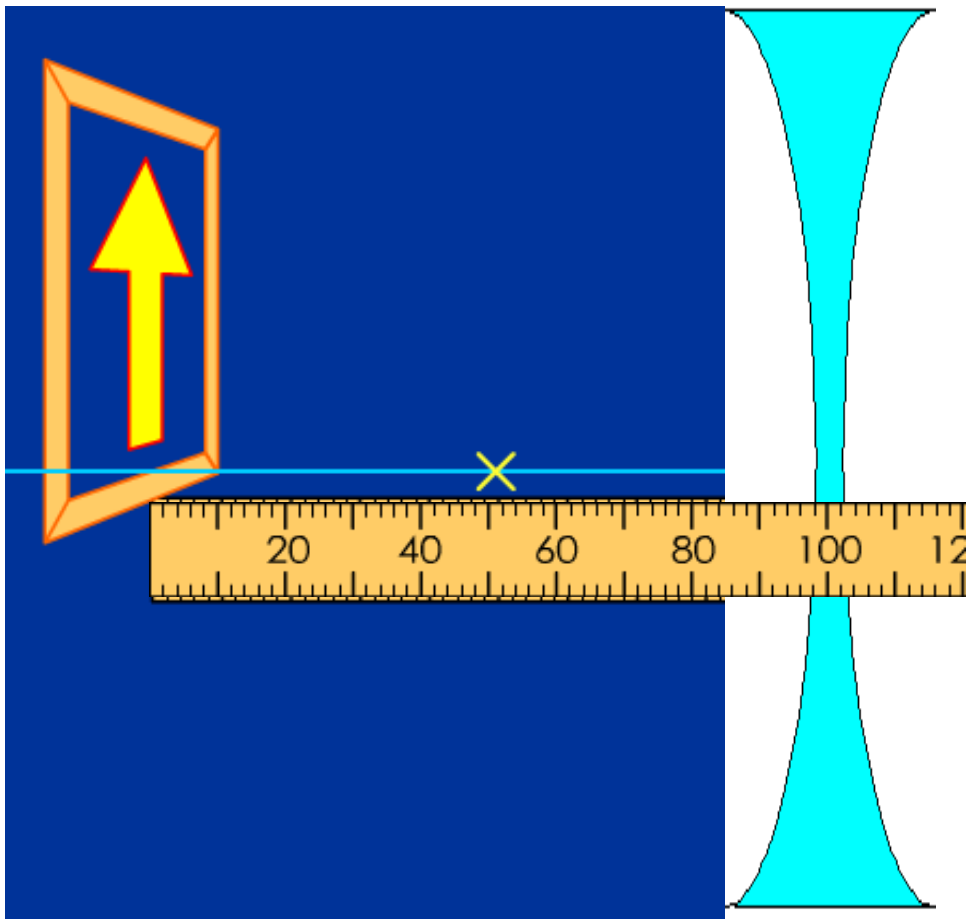
C. Larger ⇧

D. Same size ⇩

E. Smaller ⇩

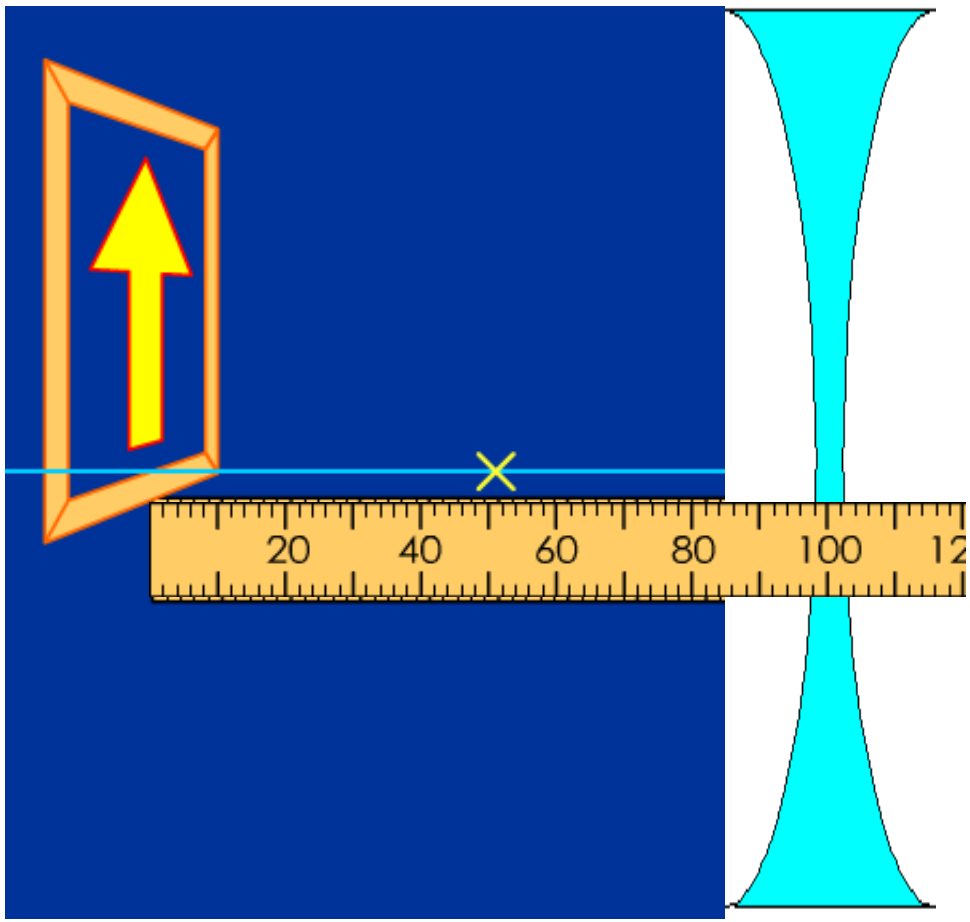

Geometric Optics - Microsoft Internet Explorer
No Rays
Marginal rays
Principal rays
Many rays
2nd Point
0.56
curvature radius(m)
1.56
refractive index
1.21
diameter(m)
change object
Show Guides
Virtual image
Screen
Ruler
20
40
60
80
100
120
140
160
180
Show Help

Where will the image appear if the lens were concave?



A. On the left, at the zero mark.
B. On the left, at the 67 mark.
C. On the left, at the 33 mark.
D. On the right, at the 200 mark.

How will the image look?



A. Same size

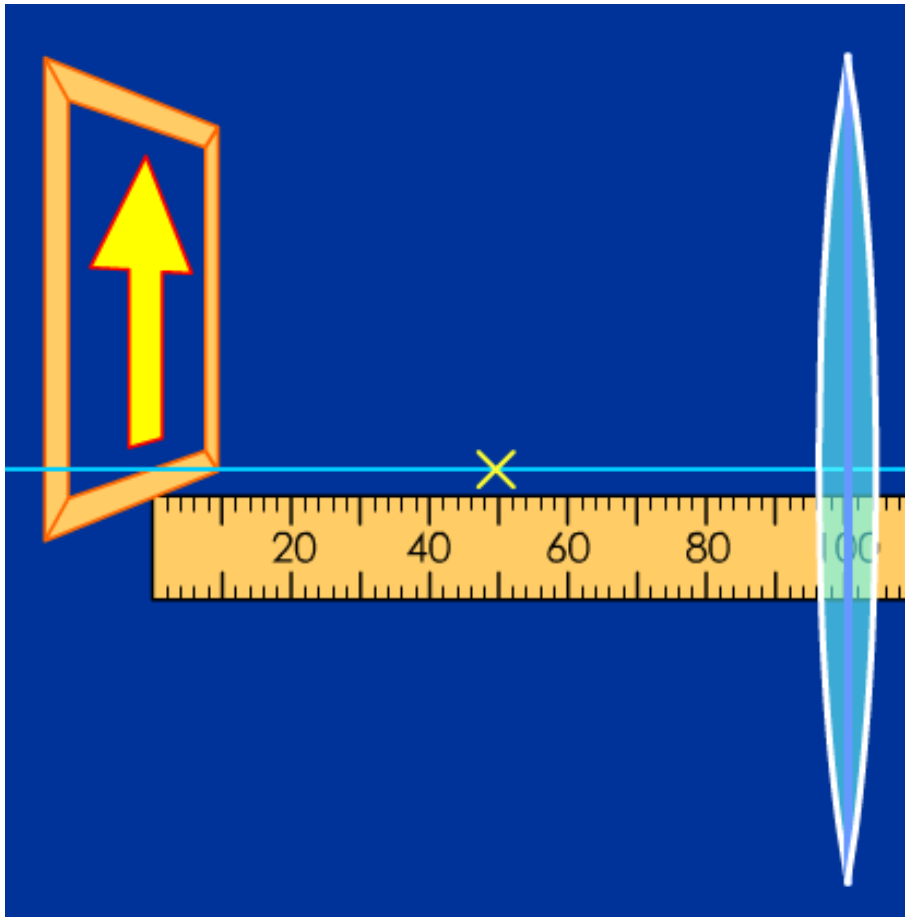
B. Smaller

C. Larger

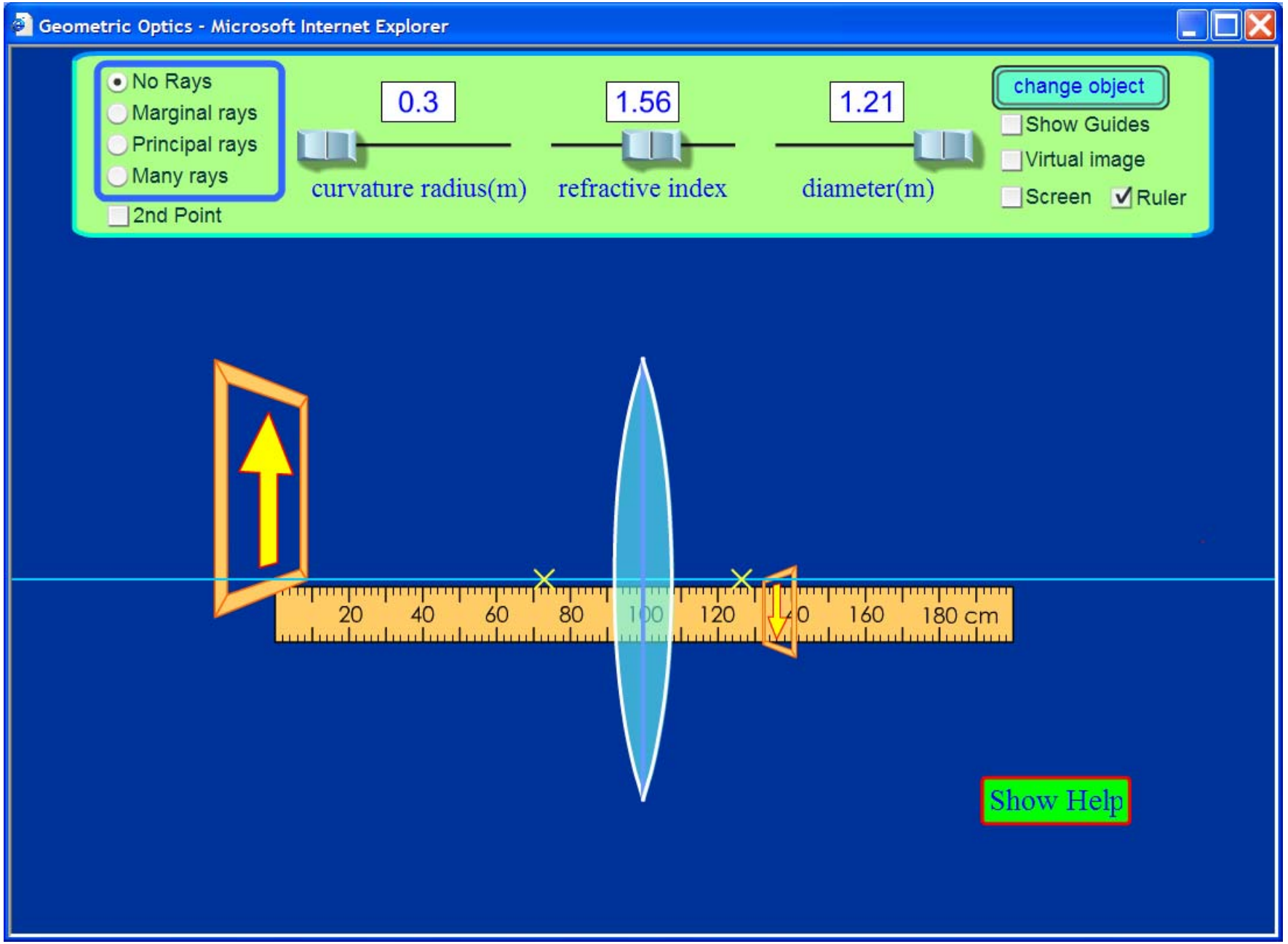
D. Same size

E. Smaller

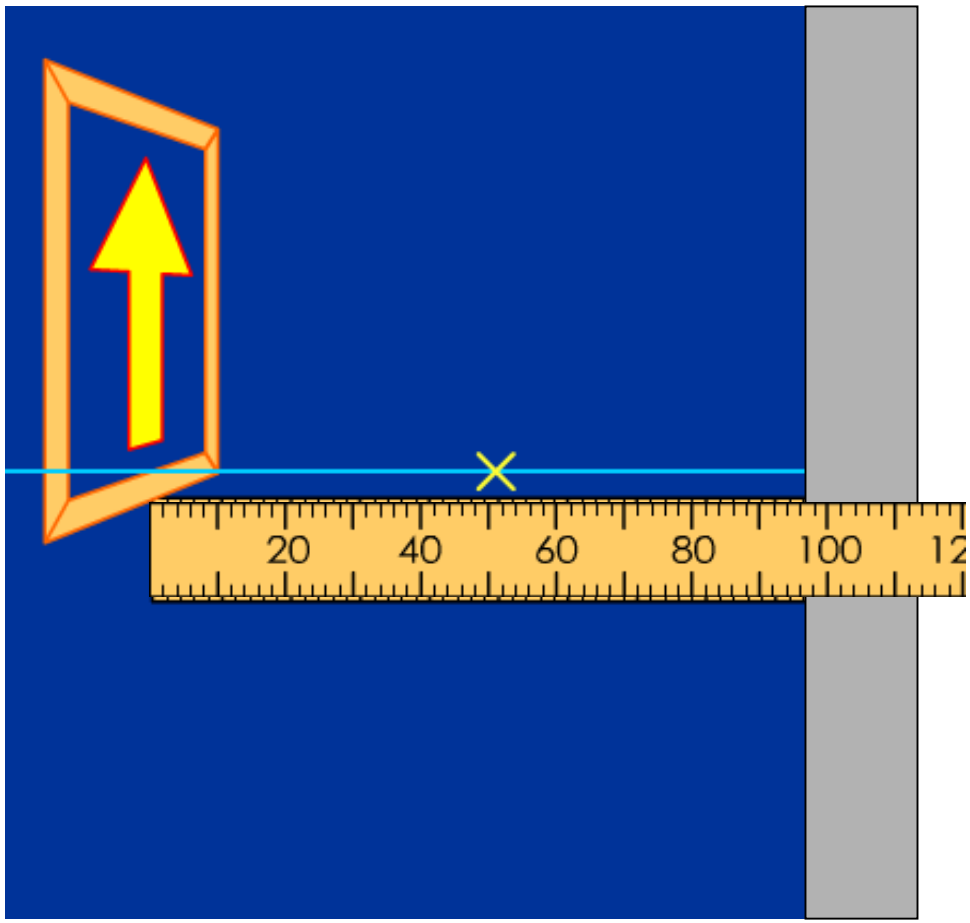
If the lens is made fatter in the middle, how will the image change?



A. Larger, further away
B. Smaller, further away
C. Larger, closer
D. Smaller, closer


Geometric Optics - Microsoft Internet Explorer
No Rays
Marginal rays
Principal rays
Many rays
2nd Point
0.3
curvature radius(m)
1.56
refractive index
1.21
diameter(m)
change object
Show Guides
Virtual image
Screen
Ruler
20
40
60
80
100
120
140
160
180 cm
Show Help

If you replace the lens with a mirror, the image will be



A. Same size

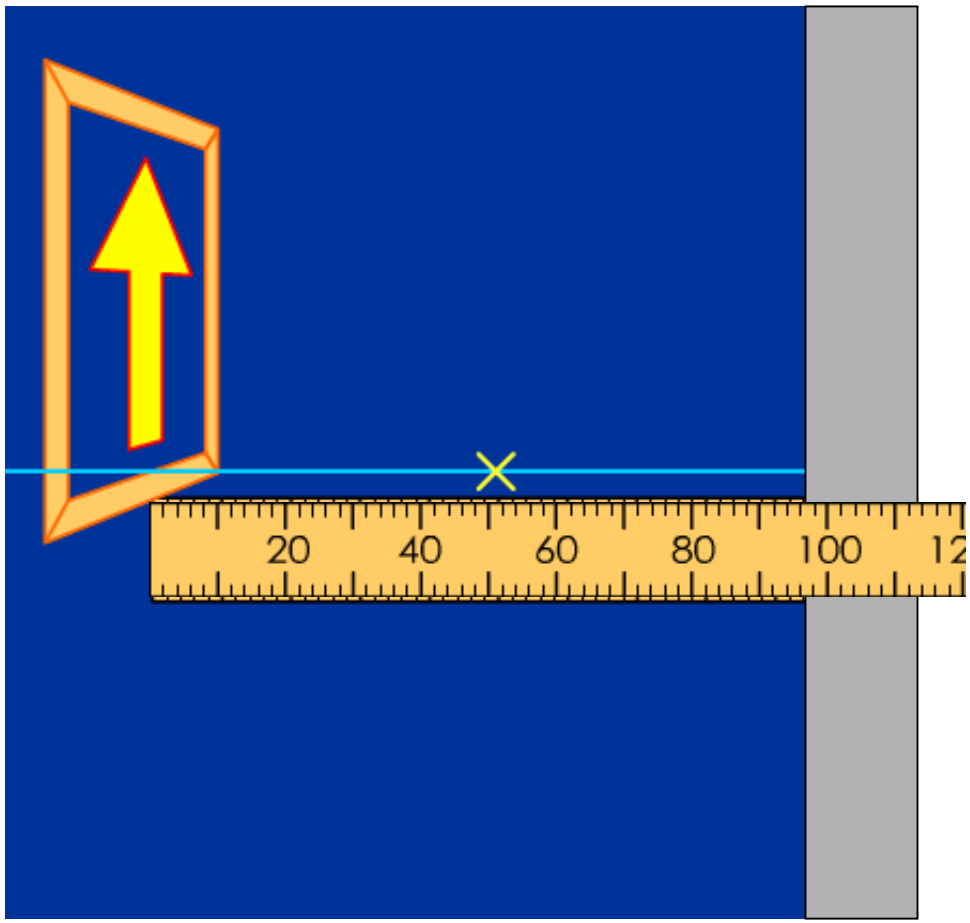
B. Smaller

C. Larger

D. Same size

E. Smaller

If you move the arrow towards the mirror, the image will be



A. Same size ⇧

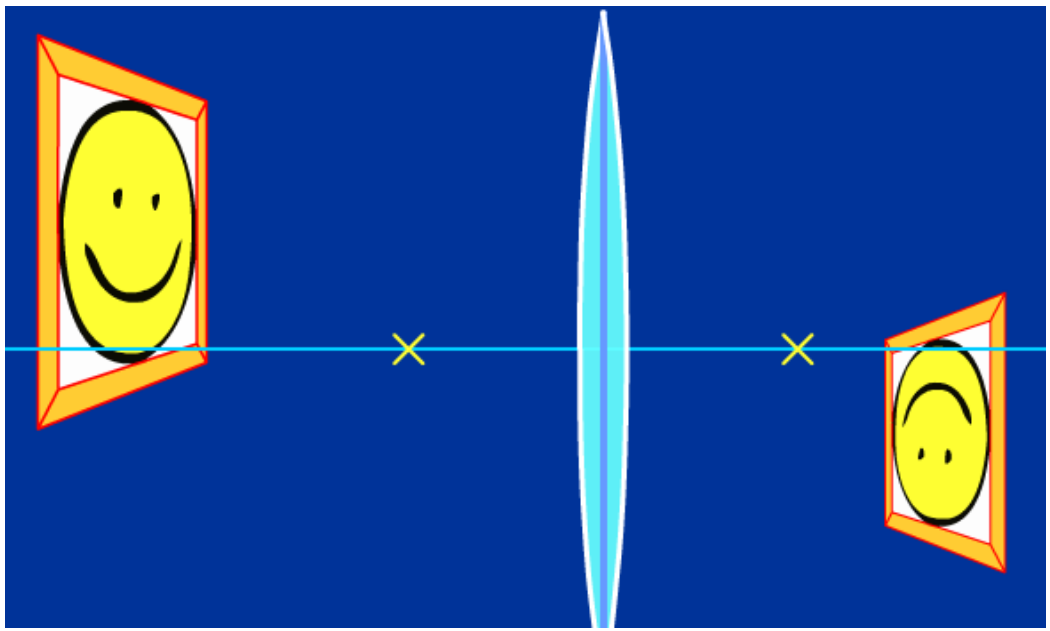
B. Smaller ⇧

C. Larger ⇧

D. Same size ⇩

E. Smaller ⇩

If the lens had a lower index of refraction, the image be



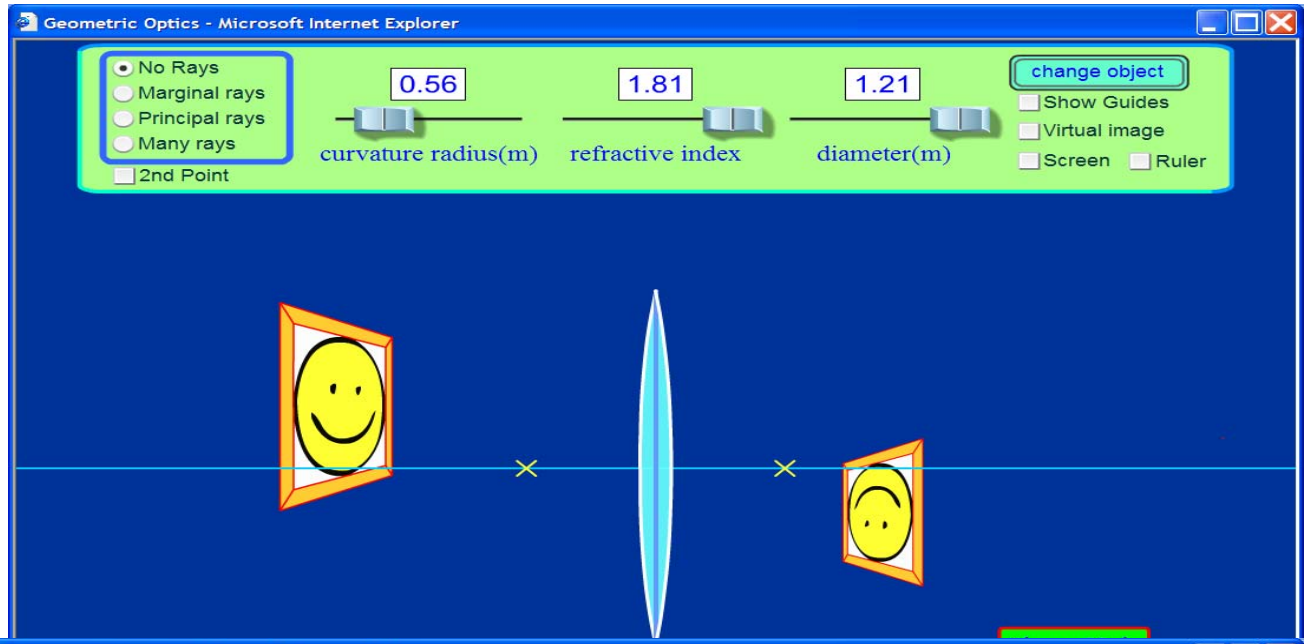
A. Same size

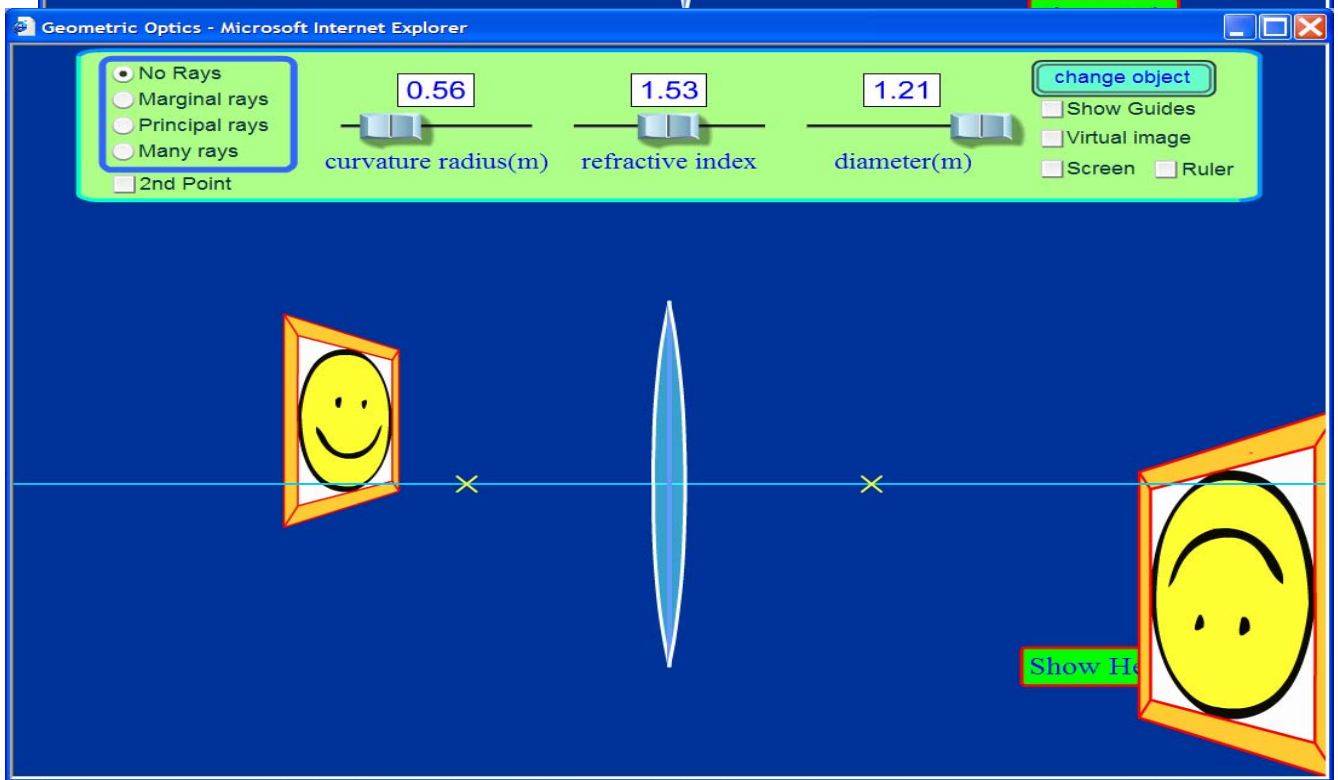
B. Smaller

C. Larger

D. Same size

E. Smaller


Geometric Optics - Microsoft Internet Explorer
No Rays
Marginal rays
Principal rays
Many rays
2nd Point
0.56
curvature radius(m)
1.81
refractive index
1.21
diameter(m)
change object
Show Guides
Virtual image
Screen
Ruler


Geometric Optics - Microsoft Internet Explorer
No Rays
Marginal rays
Principal rays
Many rays
2nd Point
0.56
curvature radius(m)
1.53
refractive index
1.21
diameter(m)
change object
Show Guides
Virtual image
Screen
Ruler
Show He