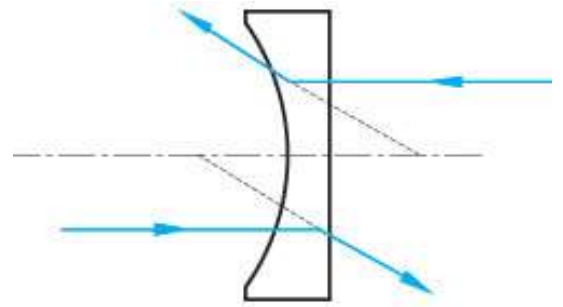


Name: \_\_\_\_\_

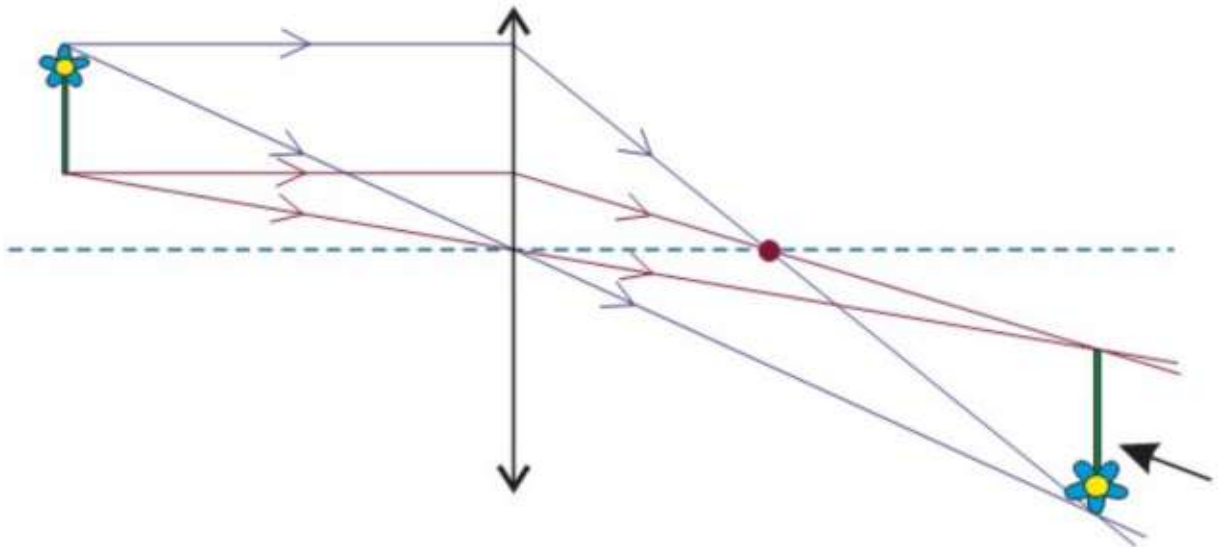
Class: \_\_\_\_\_

Total Possible Marks: 8

## Ray Diagrams (convex)



- 4 1. Complete the image below by adding rays of light, passing through the appropriate points showing the flower in its correct location and correct orientation on the ray diagram.



- 1 2. Images formed by convex lenses - the type of image formed by a convex lens depends on where the object is placed in relation to the principal focus  $F$ . Consider the below statement and decide from the options below where the object will be placed to produce the stated effect.

**An object placed here will make a virtual image that is the right way up but bigger than the object and on the same side of the lens as the object.**

- a. ☐ Beyond  $2F$
- b. ☒ Between the lens and  $F$
- c. ☐ At  $2F$
- d. ☐ Between  $F$  and  $2F$

- 1 3. Images formed by convex lenses - the type of image formed by a convex lens depends on where the object is placed in relation to the principal focus  $F$ . Consider the below statement and decide from the options below where the object will be placed to produce the stated effect.

**An object placed here will form a real, inverted image that is bigger than the object. It will sit beyond  $2F$  on the far side of the lens.**

- a. ☐ At  $2F$
- b. ☐ Beyond  $2F$
- c. ☒ Between  $F$  and  $2F$
- d. ☐ Between the lens and  $F$

- 1 4. Images formed by convex lenses - the type of image formed by a convex lens depends on where the object is placed in relation to the principal focus F. Consider the below statement and decide from the options below where the object will be placed to produce the stated effect.

**An object placed in this position will produce a real, inverted image that is the same size as the object**

- a. ☒ At 2F
- b. ☐ Between F and 2F
- c. ☐ Beyond 2F
- d. ☐ Between the lens and F

- 1 5. Images formed by convex lenses - the type of image formed by a convex lens depends on where the object is placed in relation to the principal focus F. Consider the below statement and decide from the options below where the object will be placed to produce the stated effect.

**An object placed here will produce a real, inverted image that is smaller than the object. It will sit between F and 2F on the far side of the lens.**

- a. ☐ At 2F
- b. ☒ Beyond 2F
- c. ☐ Between F and 2F
- d. ☐ Between the lens and F