## chapter 5 Curved Mirrors: Images from a Distant Object

Goal - Show your understanding of where images form with concave mirrors.

## What to Do

In this activity, find the location of the top of the tree. Then complete the image.
The first diagram has been done for you. Here are the steps to follow:

1. Draw a light ray from the top of the tree to the mirror.
2. Draw a dotted line from there to $C$, the centre of curvature. This is the normal for that ray.
3. Draw the reflected ray from the mirror at the same angle as the angle of incidence on the other side of the normal.
4. Repeat with a second ray. The image of the top of the tree is where the reflected rays cross.
5. To complete the image, draw the rest of the tree to connect it to the axis.

Now find the images of the tree in the other two mirrors.



## Answer the following questions.

1. In what way are the mirrors different?
2. How does the curvature of the mirror affect the location of the image?
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