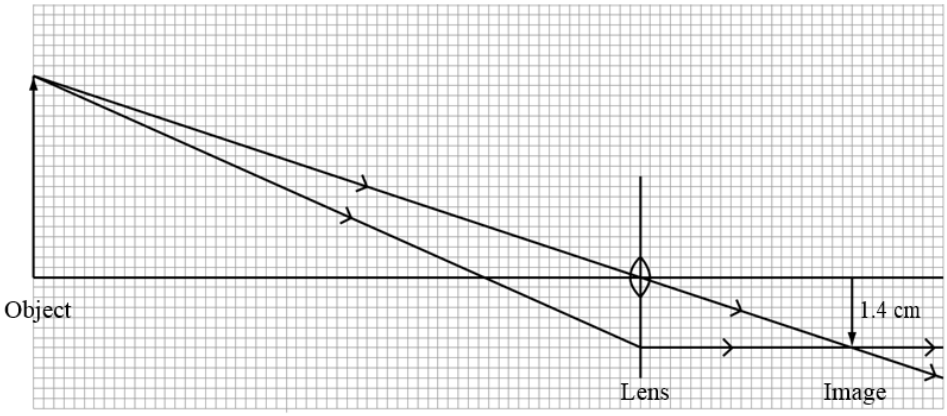
LENSES AND RAY DIAGRAM 3

Q1 (a) The diagram shows the position of an image formed in a camera.



6 (c)(i) What type of lens is shown in the diagram?

(1 mark)

(c)(ii) Use the equation in the box to calculate the magnification.

magnification =	$\frac{\text{image height}}{\text{object height}}$

Show clearly how you work out your answer.

Magnification = _____

(2 marks)

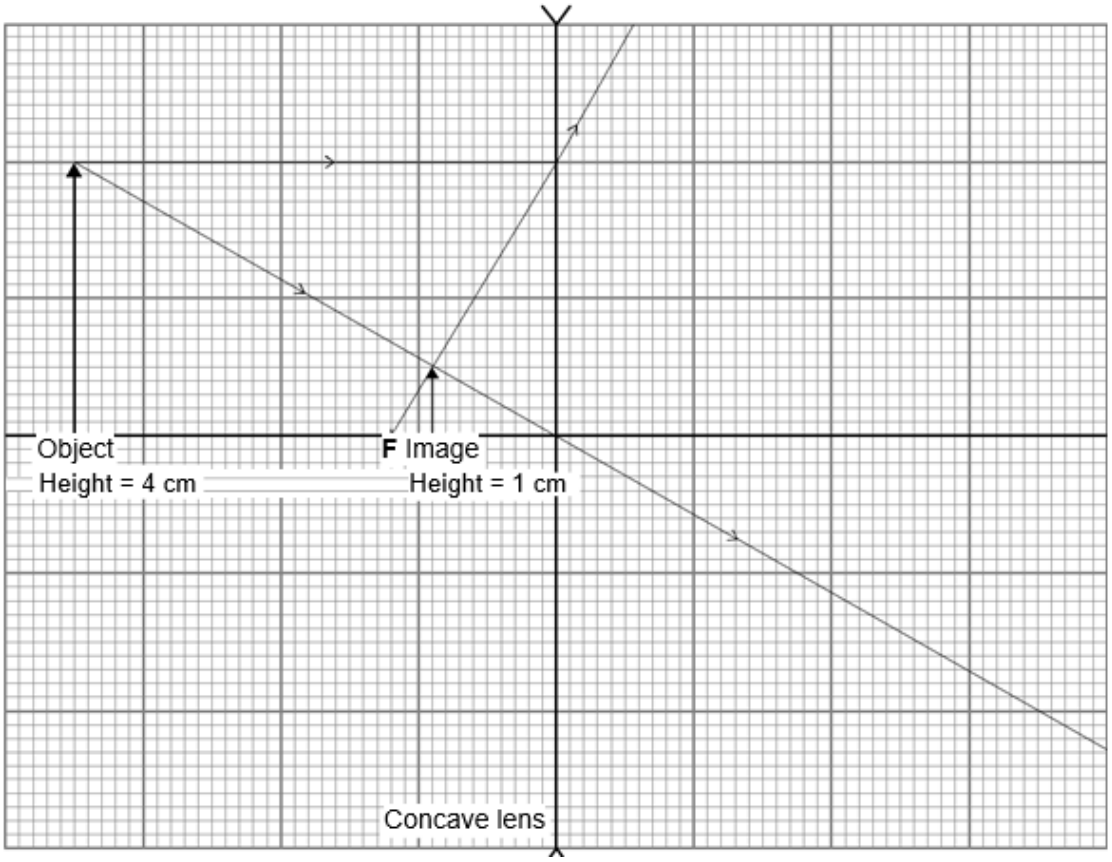
(d) Why does the image formed in a camera have to be a real image?

(1 mark)

Q2 (a) A concave (diverging) lens is fitted into a door to make a security spyhole.

Figure 10 shows how this lens produces an image.

Figure 10



(i) State one word to describe the nature of the image in Figure 10.

[1 mark]

(ii) Use data from Figure 10 to calculate the magnification of the image.

Use the correct equation from the Physics Equations Sheet.

Magnification = _____

(c) (iii) What is another use for a concave lens?

A magnifying glass	
Correcting short sight	
To focus an image in a camera	

[1 mark]