

2

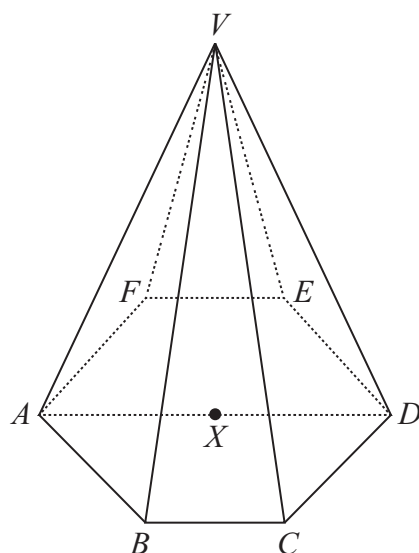


Diagram **NOT**  
accurately drawn

### Figure 1

Figure 1 shows a right pyramid with vertex  $V$  and base  $ABCDEF$  which is a regular hexagon. The diagonal  $AD$  of the base is 10 cm and  $X$  is the mid-point of  $AD$ . The height  $VX$  of the pyramid is 12 cm.

- (a) Find the length of  $VA$ . (2)
- (b) Find, in degrees to 1 decimal place, the size of the angle between the plane  $VAB$  and the base. (4)

This image shows a full page of white paper with horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings present.

4



[illegible]

[illegible]

(Total for Question 2 is 6 marks)