15

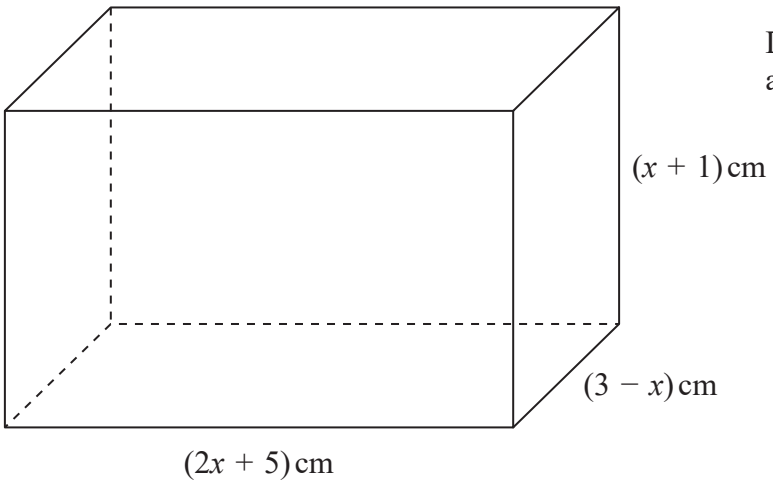


Diagram **NOT** accurately drawn

The diagram shows a cuboid of volume V cm^3

(a) Show that $V = 15 + 16x - x^2 - 2x^3$

(3)

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There is a value of x for which the volume of the cuboid is a maximum.

(b) Find this value of x.
Show your working clearly.
Give your answer correct to 3 significant figures.

$x =$ .....

(5)

(Total for Question 15 is 8 marks)

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