21 The diagram shows the prism *ABCDEFGHJK* with horizontal base *AEFG*

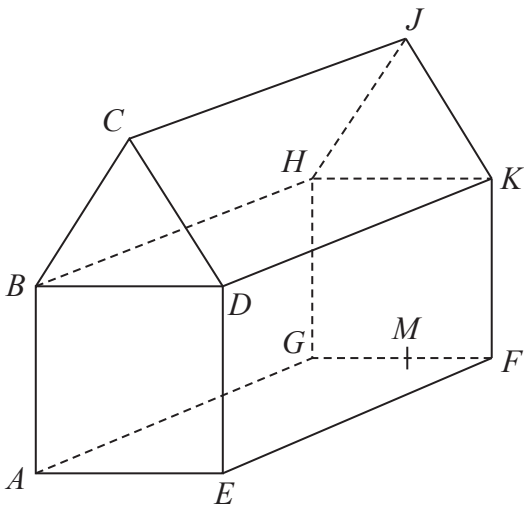


Diagram **NOT** accurately drawn

ABCDE is a cross section of the prism where
ABDE is a square
BCD is an equilateral triangle

$EF = 2 \times AE$
M is the midpoint of *GF* so that *JM* is vertical.

Angle $MAJ = y°$

Given that $\tan y° = T$

find the value of *T*, giving your answer in the form $\dfrac{\sqrt{p} + \sqrt{q}}{17}$ where *p* and *q* are integers.

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$T =$ .....

(Total for Question 21 is 5 marks)

Turn over for Question 22

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