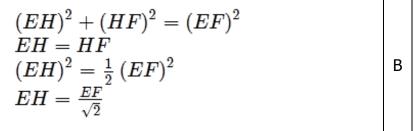
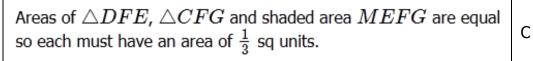


## **Kite in a Square - Method 3**

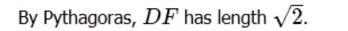
Cut out the statements and order them to show how to find the shaded area.

The area of $\triangle DMC=2$ sq units. The area of $\triangle DFC=1$ sq unit. Thus the combined area of $\triangle DFE$ , $\triangle CFG$ and shaded area $MEFG$ is 1 sq unit.	Α
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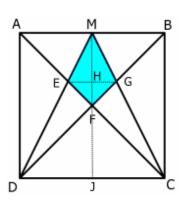


The total area of the square is 4 sq units, so the shaded area is  $\frac{1}{12}$  the area of the whole square.

Area of 
$$\triangle DFE=\frac{DF\times EF}{2}$$
 =  $\frac{\sqrt{2}\times EF}{2}=\frac{EF}{\sqrt{2}}$ 

So the shaded area MEFG is equal to the area of  $\triangle DFE$ .

Assume that the sides of the square are each 2 units long. Thus, DJ and FJ are each 1 unit long.



Ε

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