

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

The shaded area is made up of two congruent triangles, one of which has vertices $(\frac{1}{3}, \frac{2}{3}), (\frac{1}{2}, \frac{1}{2}), (\frac{1}{2}, 1)$.	A
The line joining $(0, 0)$ to $(\frac{1}{2}, 1)$ has equation $y = 2x$	B
Area of the triangle = $\frac{1}{2} (\frac{1}{2} \times \frac{1}{6}) = \frac{1}{24}$	C
The line joining $(0, 1)$ to $(1, 0)$ has equation $y = 1 - x$.	D
Therefore the shaded area is $2 \times \frac{1}{24} = \frac{1}{12}$	E
The point (a, b) is at the intersection of the lines $y = 2x$ and $y = 1 - x$.	F
Consider a unit square drawn on a coordinate grid.	G
The perpendicular height of the triangle is $\frac{1}{2} - \frac{1}{3} = \frac{1}{6}$.	H
So $a = \frac{1}{3}, b = \frac{2}{3}$.	I
The line joining $(0, 0)$ to $(1, 1)$ has equation $y = x$.	J

