

Cut out the statements and order them 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

