10. (a) Sketch the graph with equation

$$y = |3x - 2a|$$

where a is a positive constant.
State the coordinates of each point where the graph cuts or meets the coordinate axes.

(2)

(b) Solve, in terms of a, the inequality

$$|3x - 2a| \leqslant x + a$$

(4)

Given that $|3x - 2a| \leqslant x + a$

(c) find, in terms of a, the range of possible values of $g(x)$, where

$$g(x) = 5a - \left|\frac{1}{2}a - x\right|$$

(3)